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March 14, 2000

BY HAND

David Waddell
Executive Secretary
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, Tennessee 37243

Re: *Rulemaking Proceeding—Regulatory Reform Rules regarding Interexchange
Carriers—Rules 1220-4-2-.55(2) ("IXC Rules")*
Docket No. 98-00097

Dear Mr. Waddell:

In light of the fact that the TRA has not made a decision in this case, we feel it is appropriate to update the record in this proceeding. As such, enclosed please find an original and thirteen copies of the following.

- ❖ AT&T Supplemental Filing (#3)
- ❖ Consumer Report on Long Distance Companies (video)

These materials further set forth and support AT&T's position that the long distance market in Tennessee is competitive, and that such competition is an effective price regulator, therefore, the TRA should eliminate price regulation of interexchange carriers in Tennessee.

If you have questions, please call me.

Sincerely,


Jim Lamoureux

Encls.

cc: Vance Broemel, Esq.
Susan Berlin, Esq.
James Wright, Esq.

AT&T Supplemental Filing

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EXECUTIVE SECRETARY

TRA Rulemaking Proceeding— Regulatory Reform Rules regarding Interexchange Carriers—Rules 1220-4-2- .55(2)(“IXC Rules”)

Docket No. 98-00097

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Tennessee Regulatory Authority

TRA Consumer Information



Tips for Lowering Your Long Distance Telephone Bill

If you believe your long distance company is charging you too much - in flat fees, monthly minimums, and per-minute charges, there are several options that may lower your bill.

Option 1: Call your long distance telephone company.

Ask about calling plans.

Ask if changing your calling plan will lower your bill, based on your calling history.

Ask for details - are there any monthly flat fees on the plans that your company recommends? What about other charges for federal and state programs and taxes?

Option 2: Switch long distance companies.

There are many competitors in today's long distance market.

Consumer-oriented websites and publications are great places to begin your search. See, for example, www.fcc.gov and www.trac.org on the Web, and Consumer Reports Magazine.

Know your calling pattern. Do you make most of your calls on the weekend? Or are most of your calls during weekdays? Gathering some old long distance bills can help.

Call some competitors to ask about monthly flat fees and per-minute rates. What is their best plan, based on your calling pattern?

Don't forget the details - are there any monthly flat fees? What about other charges for federal and state programs and taxes? You may be surprised to find out that companies don't all have the same charges for federal programs - shop around!

Option 3: Consider dropping your long distance company.

You can drop your current long distance company without switching to another company.

If you make very few long distance calls each month (or no calls at all), you may be able to save money by dropping your long distance company.

If you do this, you will have no presubscribed long-distance company, so you will not be able to make long distance calls by dialing "1" plus the area code and phone number.

However, you can still make long distance calls by using dial-around companies.

Be a savvy shopper if you plan to use dial-around. Consumer-oriented websites and publications can help.

Before using a dial-around company, ask about whether any flat monthly charges apply.

Also, what are the per-minute rates? Are any charges for federal or state programs added? What about taxes?

How do you drop your long-distance phone company? Call your local phone company and tell them that you no longer wish to have a presubscribed long distance carrier for your phone line. Your local phone company may charge you a small fee to drop your long distance company, the same fee it charges customers who switch long distance companies and it may charge you a "Presubscribed Interexchange Carrier Charge" directly.

- FCC -

COMMON CARRIER BUREAU CONTACT: Richard Lerner, 202/418-1520

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Tennessee Regulatory Authority

TRA Consumer Information



Shopping In The New Telecommunications Marketplace

January 1998

For years, you've been able to choose your long distance company. Depending on where you live, you've also been able to choose your regional (local toll) telephone service provider. Soon you may be able to select your local telephone company as well. That's because the Telecommunications Act of 1996 opens up the telephone industry to wider competition.

What does this mean for you? Choices and, in some cases, lower prices. In the near future, you may get offers to purchase local, regional, and long distance services from a variety of companies. What's more, for the first time in a long time, you may be able to purchase your local, regional, and long distance phone service from the same company. Greater competition and choice will lead to an array of services, from both well-recognized companies and start-up businesses. Cable television companies, utility companies, and Internet service providers (ISPs) may compete with telephone companies to provide you with telephone and other communications services.

This brochure is designed to help you evaluate your use of telephone services, sort through the offers you're likely to receive, and make some sensible decisions.

Basic Services

Although you're probably quite familiar with your local and long distance telephone services, you may not be aware that your phone bill may list charges for three different types of telephone service: local, regional, and long distance.

- *Local service* covers calls within your local calling area—that part of your regional calling area closest to home. Local calls generally are not itemized.
- *Regional toll service* (also called "local toll," "local long distance," and "short haul long distance" service), covers calls to places outside your local calling area, but generally not as far away as those covered by a long distance toll service. (Check your White Pages directory for a map of your regional calling area.) These calls are listed separately from local calls and are generally itemized on your bill. They typically are billed at a per-minute rate (depending on the time of day and distance), and are usually more expensive than local calls.
- *Long distance toll service* covers calls that travel outside your regional calling area. You dial "1" + area code + 7-digit number for long distance toll calls.

Getting Started

Consider your current calling habits and costs for local, regional, and long distance service by reviewing your telephone bills over the last three to six months. Also ask yourself:

- What's included in my basic local telephone service? What services cost extra? What customized services do I currently have? What services do I need? Do I expect my needs to change?
- Which company currently provides my local service? My regional toll service? My long distance toll service?
- What are my calling patterns? Do I place most of my regional and long distance toll calls to the same numbers during the same hours? How many of these calls do I make in the evening and on weekends? How many calls do I make each month? How long do I talk?
- What do I pay now for local, regional, and long distance telephone service? Do I lease or own

my telephone equipment? What other communications services do I purchase, such as Internet access, mobile or cellular phone, or paging service? How much do I spend on all of my communications service?

- Am I on a calling plan with my regional or long distance company? Do I use a calling card to place calls while away from home? What special savings do I have through my calling plan or calling card, and what restrictions apply to them?

Getting a handle on details such as these will give you a more complete picture of your needs and put you in a better position to comparison shop. You may decide to drop some services and add others. You may want to go with one company for all your service needs, or use different companies for local, regional, and long distance service.

Comparing Services

Base your comparisons on the desirability, quality, and cost of the services available. Ask the following questions of each company that you're considering:

- Is there a monthly charge, monthly minimum charge, or per-use charge for any service?
- Do I have to commit to use your company's service for a certain period of time? If so, is there a fee for canceling early?
- How does your company handle inquiries and complaints for each of the services you provide? Is there a 24-hour customer service department? Are customer service calls toll-free?
- How will I be billed? Will my statement be itemized?
- Who do I call for repairs? Billing problems?
- Do you offer discounts if I buy several services from your company? Can I customize a package to fit my needs? Customized services may include cellular, paging, Internet access and connections, fax, call waiting, call forwarding, call blocking, call trace, caller ID, voice messaging, text telephone (TTY), inside wire maintenance, and a regional or a long distance calling plan. What costs are involved with these products and services? Will I need additional phone lines?
- Do you have special services for customers with vision, speech, or hearing problems? Is there an extra charge for these services? If so, how much? Do I have an option to purchase or lease the equipment?
- Are there discount telephone services available for low-income consumers, such as discounts for establishing service, on monthly charges, or on long distance toll calls?

Dial "C" for Caution

Review all mail and telephone offers for communication services carefully. Be aware of the following deceptive sales techniques:

- *Slamming.* This is the unauthorized switching of your phone service from one telephone company to another. Federal law and the Federal Communications Commission's (FCC) rules and policies prohibit slamming and require carriers to verify a carrier change. Some unscrupulous marketing techniques may cause you to switch services unintentionally. If you fill out any "information," "contest," or offer forms, read them carefully to determine whether completing and signing the form will change your local, regional or long distance service to another company. And be very careful about what you say to telemarketers that call to sell you telephone service. Get an address and phone number. If you have any doubt about the offer, ask for it, and any agreements, in writing.
- *Huge discounts.* Some companies may try to entice you to switch to their service by offering "great discounts." These companies often compare their rates only to the highest rates of well-known carriers and may charge a hidden monthly access fee.
- *Introductory offers.* Some plans may give you service at a discounted rate for a limited time, then increase the rate unless you cancel. Remember, companies often charge a fee for changes in service. Ask about all fees and cancellation policies before you sign up. Get them in writing.
- *Package deals.* Some companies may offer discounts if you buy a package of services. Consider

- your calling needs and patterns. It may be cheaper to buy only the individual services you need.
- *Fine print.* Some companies include their minimum monthly fees or other charges in the fine print of their promotional materials. Read the fine print before signing up for or using a company's service.
 - *Verification gimmicks.* Some companies may call you to offer a great deal on one service, but when you're connected to a "verifier" to complete the sale, the verifier may try to sell you additional services. Be sure you understand the deal you've agreed to *before* you're transferred to a verifier. Then, listen carefully to the verifier to confirm that you're buying only what you agreed to, and nothing more.

Your Rights

You have rights when you shop for, select, and use a communication services company:

- The *right to choose* the services you want and need, whether you buy them separately or as a package. Resist high-pressure sales techniques to buy more than you need.
- The *right to information* so you can compare products and services and make the best buying decision for your calling needs. The companies selling you services can offer specific product information. Consumer groups also may be helpful. Consider contacting:
 - *The Tele-Consumer Hotline*, an impartial and independent consumer education service offers free publications to address your telecommunications-related concerns and issues. For free publications, send a self-addressed stamped envelope to Tele-Consumer Hotline, P.O. Box 27207, Washington, DC 20005.
 - *The Telecommunications Research and Action Center (TRAC)*, a non-profit consumer organization devoted to educating consumers on their telecommunication choices. You can request a publications list by sending a stamped, self-addressed envelope to TRAC, P.O. Box 27279, Washington, DC 20005.
 - *The FCC's National Call Center*, which provides consumer information on telephone-related issues, can be reached by calling 1-888-CALL-FCC (1-888-225-5322). You can also visit the FCC's Consumer News.
- The *right to say no to slamming.* You may request a "carrier freeze" or "carrier restriction" from your local telephone company to prevent changes to your choice of local, regional, or long distance carriers unless you contact the local phone company directly.
- The *right to change your mind.* You may want to switch to another carrier. Keep in mind that you may be charged for a change in service or canceling your existing service. If you have requested a carrier freeze, you will have to contact your local phone company directly to change carriers.

Where to Complain

If you have a problem with your telephone service, try to resolve the issue with your telephone company first. Check the front of your White Pages directory, or your bill, for information on complaint procedures.

If complaining to your telephone company doesn't work, consider contacting:

- *Your state public utilities or public service commission* about local and regional telephone service. Check the government section of your phone book or contact your local or state consumer office for the phone number and address of your state regulatory commission.
- *Your state Attorney General's office* about fraudulent or deceptive practices. Most Attorney Generals' offices have divisions that deal primarily with consumer protection issues. Check the government section of your phone book or contact your local or state consumer office for the

phone number and address of your state Attorney General's office. You can also link to the websites of the Attorney Generals' offices of many states from the National Association of Attorneys General's website.

- *The FCC* about slamming or out-of-state long distance problems. Write to: FCC, Common Carrier Bureau, Consumer Complaints, Mail Stop 1600A2, Washington, DC 20554. Your letter should include your name; address; day-time telephone number; a summary of your complaint; the names, addresses, and telephone numbers of all companies involved with your complaint; the telephone number involved with your complaint, such as your home or business telephone number; copies of disputed telephone bills and other documents, such as promotional material or the form used to change your long distance service; and the action you are requesting, such as a credit or refund for disputed charges.
- *The National Advertising Division (NAD)* of the Council of Better Business Bureaus (CBBB) about complaints concerning inaccurate or misleading national advertisements for telecommunications products or services. NAD is the advertising industry's voluntary self-regulation program. It was designed by an alliance between the advertising industry and the CBBB to review and monitor national advertising to ensure its truthfulness and accuracy. You can register a complaint by writing to: National Advertising Division, 845 Third Avenue, 17th Floor, New York, NY 10022.

This publication has been produced in cooperation with the following organizations:

AT&T
Ameritech
Bell Atlantic
Consumer Federation of America
Federal Communications Commission
Federal Trade Commission
MCI
National Advertising Division, Council of Better Business Bureaus
National Association of Regulatory Utilities Commissioners
Telecommunications Research and Action Center
Tele-Consumer Hotline
Winstar Communications
Wisconsin Department of Justice

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TRAC

Saving Money on Your Long Distance Bill

Determine Your Calling Pattern

Find Your Category on the Chart

Compare Plans

Research the Plans

Choosing a long distance carrier and calling plan can be a daunting task for even the most market-wise consumer. Everyday, we are exposed to direct mail, telemarketing, and television advertising campaigns from long distance carriers, with each company claiming to offer the best available rates and savings. With the recent passage of the Telecommunications Act of 1996, consumers are likely to face additional difficulties sorting through the numerous new calling plans and promotions which will soon be made available. New companies will enter the long distance market, local phone service will become competitive, and related services such as cellular technologies and the Internet will become increasingly important to us all. How can consumers make informed decisions with so many different factors to consider? We at the Telecommunications Research and Action Center (TRAC) suggest that you use Tele-Tips, this thorough yet simple reference tool for the thrifty consumer.

No matter what changes occur in the market, the most important questions have always remained: "Which long distance company is the cheapest?" and "How do I know which company or plan is best for me?" With an increasing number of long distance carriers offering new features and services each day, just choosing a long distance provider isn't always enough. To be certain you are getting the best rates, you must also be sure you are enrolled in the right calling plan. These plans are constantly changing, however, and a plan offered one year may be gone the next. A plan that is a carrier's cheapest one year, can suddenly become its most expensive. You can always save money on your long distance phone bill, and TRAC's Tele-Tips Residential Long Distance Comparison Chart is the best and easiest way to help you find those savings.

Saving money on your long distance bill can be done by periodically conducting long distance check-ups. How frequently you should do this depends on how much money you typically spend on long distance. The higher your phone bill, the more often you should conduct a check-up -- though it's generally advisable to do at least once per year. Recommended times to review your long distance bills are when you change your residence or calling patterns.

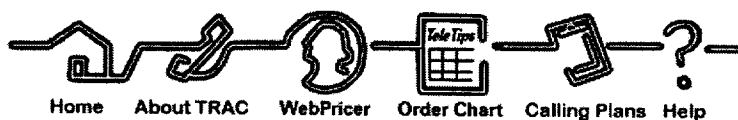
Conducting a check-up is easy. The first step is to call your carrier's toll-free customer service number and ask if you're on their least expensive calling plan. Make sure that when they look at your records, they examine a typical calling month. If you decide you are not satisfied with your current situation, this is a great time to shop around.

1. Determine Your Calling Patterns. Take a look at your long distance bills for the past three months. Determine when you make the greatest number of calls, and the average length of your conversations. Determine whether there is a pattern to your calls, such as frequently dialing the same number or area code, or making the bulk of your calls during a certain time of day. Recognizing such patterns will also help you determine which category you fit into on TRAC's comparison chart.


2. Find Your Category on the Chart. TRAC has created three typical calling baskets that are intended to reflect calling patterns based on the time of day you most often make calls. For example, if you make your calls throughout the day, evening, night, and weekend, you would be considered an "Average Daily User." Find the calling pattern that best resembles the time and money you spend on the phone in a typical month. You can calculate these numbers respectively by totalling either the number of minutes you called or the amount of money you spent over three months, and dividing that number by three (the number will be your monthly average). Use this information to determine which column most closely reflects your calling patterns.

3. Compare Plans. Now that you have found your category and column, look for the least expensive calling plans. Then, read each plan's description to ensure that you meet the requirements to receive discounted rates, and also to ensure that the plan includes all the features and services you desire.

4. Research the Plans. Once you are interested in some plans, follow-up with additional research. Call the carriers to confirm that these would, indeed, be the best plans for you, that the rates are still the same, and the features and services you want are still offered with those calling plans. Remember, plans change frequently and competition results in even more frequent rate and service changes.



WebPricer is a free service of **Salestar**
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The REAL Long Distance Rates Comparison

Below is a brief summary of the residential Long Distance rates extracted from the Yahoo page [Long Distance Telephone](#) references. This is my best effort after hours of poking hypertext links and writing down notes. No warranty as to correctness is made or implied, blah blah blah, CYA. If you have found an error, or have more information to be included, please e-mail me wengler@he.net with the company, rates, and a URL I can use to verify the information.

If you are listed in the Yahoo list [Long Distance Telephone](#) but you are not listed in this comparison and you would like to be, please send me 1) URL, 2) Name listed under in Yahoo so I can find you on list, 3) interstate LD rate, fee/month, other fees, intrastate rates for NY and CA. Duplicates of listings already here will not be added (Excel, Cognigen already listed). I will verify the info is on the web page and add you to this list. Mail information to wengler@he.net.

But first, a word from our sponsors...

- ✓ IPhoneBill - as low as 2.9 cents/minute, interstate and intrastate! No Monthly Fee! 6-Second Billing! Complicated rate structure, this is not cheaper for everyone, but if you have the patience to check, this MAY save you a LOT!
- ✓ Find LOWEST rates to call US to India, Japan, UK, Vietnam, Everywhere! (cents per minute: India 50.5, Vietnam 62.5, UK 7, China 44.5, Hong Kong 11.0, etc.!!!)
- ✓ 4.9 cents/minute Interstate available in 48 states: same low rate for your own 800 number!
- ✓ 6.9 cents/minute Interstate: same low rate for your own 800 number!
- ✓ AccuLinq 9.9 cent per minute Calling Card! No Surcharge! 6-Second Billing!

Rates from Web Pages of Companies in Yahoo:

- Rates are in cents per minute. Some are flat rates, others have different prices for peak vs. off-peak times. Fees & minimum charges are noted where they were expressed clearly in the web page. Generally, rates apply only to INTERSTATE calling. Calls within a state are, paradoxically, MORE expensive in general.
 - AmeriCom Long Distance@ (2)
Simplicity: 7.9 interstate no monthly fee. Includes 800#@7.9 interstate. 6 second billing 6 second minimum. INTRASTATE RATES LISTED.

- **AT&T@**
7 interstate, no hint what your intrastate rates are, \$5.95/month fee. Intrastate rates not given.
 - **Excel Telecommunications@ (4)**
Various plans. Monthly fee of \$1, gets 10 cents/minute interstate in all states. Monthly fee of \$4.95 gets 7 cents/minute in 48 states. Intrastate rates are higher.
 - **Long Distance Telecom**
8.9 Flat interstate, various intrastate, \$4.95 fee if bill less than \$50/month.
 - **MTX Communications**
8.6 Flat Intrastate 6 second billing, fee not mentioned, intrastate rates not mentioned.
 - **National Phone Lines Telecommunications Broker, (800) 524 4736**
\$100/month minimum to get 6.9 cent interstate. Intrastate rates listed on page.
 - **ProDial**
9.9 flat rate 6 sec billing, 18 sec minimum interstate. 800/888# at same rate. Intrastate listed on web page.
 - **SM Communications And Marketing (SMCM)**
6.9 flat interstate. No fees. 6 second billing. 800/888# at same rates. Intrastate rates listed.
 - **International Service Only**
 - **Kallback**
 - **KDD@ (2)**
 - **MTC Long Distance Services** International and credit cards.
 - **Cyberlink** with clear exposition of its International rates.
-

- **Last Updated by Mike Wengler**

Discount Long Distance Digest

The Internet Journal of the Long Distance Industry

Frequently Asked Questions

Version 4.0 August 1, 1997

[Discount Long Distance Digest Homepage](#)
[Latest Issue of Discount Long Distance Digest](#)

[Selling Long Distance - Questions and Answers](#)
[Industry Background - By Jeff Bornstein](#)
[Telecom Periodicals List](#)
[Long Distance Reseller Directory](#)
[Long Distance Carrier Directory](#)
[Complete 10XXX \(PIC\) Carrier Access Code List](#)
[Long Distance Carrier Rankings](#)

THE LONG DISTANCE RESELLER THE BIRTH OF A NEW INDUSTRY

BY: JEFFREY BORNSTEIN

In 1984, a successful anti-trust suit brought about by the Federal Government initiated the break-up of American Telephone and Telegraph (AT&T). Because AT&T was considered a monopoly, the Federal Communications Commission (FCC) prohibited AT&T from lowering its long distance rates, in effect, guaranteeing a price advantage to its fledgling competition: MCI, SPRINT, and a group of smaller carriers. When the smoke cleared, AT&T lost over 35% of its customer base.

Rather than sit back and watch their market share further erode, AT&T devised a way to effectively lower their rates to their most valued customers: Large Multi-Location Companies.

In 1985, Software Defined Network (SDN) was developed by AT&T and later sanctioned by the FCC. Businesses spending more than \$100,000 on their long-distance were offered rates that were 23% below AT&T's standard business program rates. In addition, these large companies could "enroll" their smaller, affiliated locations and receive the SDN discount on their entire long distance usage. These large companies would also benefit from additional corporate volume discounts based on the combined volume of their affiliated locations.

In 1989, AT&T filed with the FCC a seemingly innocuous SDN modification that abruptly changed the telecommunications industry. This tariff contained a provision allowing for SDN Plan Holders to arbitrarily pass their discounts on to smaller UNAFFILIATED companies.

Entrepreneurs, sensing a tremendous marketing opportunity, became SDN Plan Holders and signed-up hundreds of unrelated small companies, whose total volume collectively qualified for the SDN Program Discounts. These pooled companies received discounts of 23% off their current AT&T rates, while the

entrepreneurs collected a hefty corporate volume discount.

By having many of their smaller commercial customers "switch-over" to SDN, an environment was created whereby AT&T began to lose revenues despite having the lowest tariffed rates. Even more ironic, and much to AT&T's chagrin, the SDN program further depleted AT&T margins by accidentally creating an explosive industry and new competitor-The Reseller!

In the past few years, the Discount Long Distance Market has virtually erupted. A host of other national and regional Long Distance Carriers, anxious to build their market share, are now aggressively courting Resellers as cost effective bulk-distributors of their products and services. In addition, Resellers have been instrumental in the development of innovative and sophisticated concepts such as International Callback, Debit Cards and other enhancements.

However, the commercial customer (end-user) is the real beneficiary of the symbiotic relationship between carrier and reseller as the cost of long distance service and ancillary products becomes even more competitive. Many business owners are becoming aware of the advantages of purchasing their long distance from a reseller. Commercial customers are migrating from their direct carrier relationships in favor of feature-rich and substantially discounted products and services available only from resellers and their marketing arms. Through a reseller, long distance customers can now purchase the services of their preferred carrier at rates discounted by as much as 35%.

THE OPPORTUNITY: The marketing opportunities in long distance are enormous. Resellers need quality sales organizations and sales agents to market their products and services. The most attractive aspect of selling long distance is the ability to earn a "residual" commission from every sale. Some resellers are paying their Agencies monthly residual commissions of up to 30%. Just one account billing \$500 per month would create a residual commission of up to \$150 EVERY MONTH, for as long as that account remains with the reseller. It is quite realistic for a full time long distance sales agent to earn \$50,000 per annum once he or she has gained some industry knowledge and experience. Although there are costs involved in marketing long distance, one can "bootstrap" an operation by working out of his or her home. All one needs are a desk, a telephone and a list of businesses to contact, and of course a quality reseller to market for!

The 'pitch' can be as simple as "Mr. Business Owner...I am calling to see if you qualify for our company's group discount program. If you do, you can stay with your present long distance carrier and nothing will change, except the amount you pay for your long distance service!"... Of course, this analogy is simplistic, but it illustrates the point: discount long distance is easy to market and because there are normally no fees associated with reselling, **NO MONEY HAS TO BE COLLECTED!**

Some sales organizations have a natural affinity with long distance. Telemarketing Operations and Interconnects are examples of companies in related fields that are seeking additional revenues by marketing long distance services for resellers. However, it is important to note that related industry-experience is not a prerequisite for success. In fact, the most essential aspect of successfully marketing long distance is choosing the right reseller to market for:

HOW TO CHOOSE A RESELLER

The Telecommunications Reseller's Association (TRA) suggests you ask the following questions of prospective resellers:

- How will the long distance service be tailored to my customer's needs?
- Does the reseller offer customized billing?
- Is there 24-Hour customer support?
- Is the reseller financially stable?

- Is the reseller certified by the state regulatory body?
- Is the reseller a member of the TRA? (The TRA has a stringent Code of Ethics that its members must follow. The organization will expel companies working outside the code. Choosing a company within the organization ensures a degree of trustworthiness.)

By following these guidelines, any company or individual that has experience in selling to businesses can become successful in one of the most viable, dynamic and emerging industries in America.

JEFFREY BORNSTEIN...
Telecommunications On Demand
(800) 754-4411
tcdemand@aol.com

➤ [Go to TOD's Homepage...](#)

Telecom Periodicals

This area of the FAQ File has become so large that we have had to spin it off into it's own section! This page contains a list of numerous telecom related magazines, newsletters, books and tapes. We are adding more all the time! You'll find lots of great information in these publications that you CAN'T find anywhere on the internet!

Telecom Periodicals Listings

THE RESALE INDUSTRY'S TRADE GROUP

Telecommunications Reseller's Association
1155 Connecticut Ave. NW, Suite 401
Washington, D.C. 20036
(202) 835-9898
CONTACT: Ernest B. Kelley

The TRA acts as the resale industry's collective trade group. TRA holds 2 resale exhibitions each year for carriers, resellers and agents. TRA has an official code of ethics, and most member resellers are viewed as having reputable business standards. If you'd like more information on the long distance resale industry, or a list of member resellers who are currently recruiting new agents, you can contact TRA at the above number for free details, or drop them a line via e-mail at the following address:

➤ resellers@tra-dc.org

RESELLER DIRECTORY

The following is a list of resellers and carriers of long distance services. Each recruits independent agents to market their services. Contact them directly for more information.

COMPANY	PHONE #	CONTACT PERSON
=====	=====	=====

ACI/Advantage Comm	(216)	929-2222	Charles Reed	D
ALI Communications	(800)	795-1134	Ed Balma	A,B,C,D,E
American Tel Group	(800)	828-2317	Chuck Arning	A,B,C
American Teletronics	(312)	372-7575	Henry Paulson	A,B,C
AmeriCom Inc.	(800)	955-9385	Dick Kreutzer	A,B,C
americonnect	(913)	341-8888	Susan K. Bane	A,B,C,F
Amer Travel Network	(800)	477-9692	Jeff Bein	A,B,C
AMVID TRAVEL CARD	(203)	322 3836	Maury Siegel	C,D,E
ARCH Telecom	(800)	272-4835	Steven Friedlander	B,C,F
CIMCO Communications	(708)	691-8080	William Caparo	A,B,C
Cognigen Communications	(206)	361-7487	Kevin Anderson	A,B,C,D,E,F
Cominex	(800)	627-9444	Jerry Gabris	D,F
Comm Buying Group	(216)	831-6060	Mark Krinsky	A,B,C
Comm Gateway Network	(800)	569-0010	Marc Troup	A,B,C,D,E,F
Concord Net Services	(312)	440-8844	Chris Moore	A,B,C
Equal Net	(800)	725-5575	Reuben Garcia	A,B,C
The Furst Group	(800)	458-4736	Peter Cumming	A,B,C
GlobalNet 2000	(415)	461-1255	Michael Luchino	A,B,C
Group Long Distance	(305)	771-9696	Gerald Dunne	A,B,C
IBN Telecom	(209)	579-2667	Stan Countz	A,B,C
LDM Systems	(914)	638-0001	Irwin Schneider	A,B,C
Leading Edge	(404)	952-5040	Sheryl Adams	A,B,C
Link USA	(800)	364-2911	Chris Shroyer	C,D,F
HCC Telemanagement	(800)	568-5681	Bernadette Richardson	A,B,C
MagNet	(305)	432-4386	Mike Fineberg	A,B,C
Matrix Telecom	(817)	581-9380	Dennis Miga	A,B,C
National Calling Plan	(914)	762-6800	Jaime Arko	A,B,C
NOS	(800)	882-4667	William Fleichman	A,B,C
NTC	(818)	834-6672	Joe Williams	A,B,C
Orange Card	(612)	471-0223	Mike Grahek	A,B,C
PACE Long Distance	(412)	836-5800	John Cramer	A,B,C
Price Communications	(510)	793-3186	Leonil Distor	A,B,C,D,F
Qwest Communications	(800)	899-7780	Andrew Kuehnel	A,B,C,D,E
Standard Telecom	(708)	268-9222	Robert Donahue	A,B,C
Star Telecom	(305)	386-5343	Ron Valme	A,B,E
Target Telecom (TTI)	(201)	256-1600	Ron Klein	A,B,C
Telcorp Ltd.	(516)	569-5000	Stephen Samuels	A,B,C,D,F
Telecom One	(414)	821-9200	Bill Linsmeier	A,B,C
TOD, Inc.	(800)	754-4411	Jeff Bornstein	A,B,C,D,F
Telegroup	(800)	338-0225	J. Viviano	A,B,C,D,E
Telenational	(800)	829-0634	Bruce Burton	A,B,C
Tele-Trend	(303)	773-9511	John Schall	A,B,C
Transnational	(800)	225-7678	Keith Cooper	A,B,C
TW Communications	(602)	222-8844	Steve Reynolds	A,B,C
Unidial	(800)	393-7300	Sherm Henderson	A,B,C,D
U.S. Fibercom Network	(212)	302-3365	Jerry Johnson	A,B,C
U.S. WATS	(800)	874-9287	Ron Vandell	A,B,C
Value-Tel	(800)	777-1841	Brian Sledz	A,B,C,E
WATS International	(800)	421-9287	Gary Gomer	A,B,C,E

SERVICES PROVIDED

A=Dial-1, B=800 Service, C=Calling Cards, D=Debit Cards, E=Intl Callback, F=Value-Enhanced Services

LONG DISTANCE CARRIERS

The following is a quick reference list of the nation's largest long distance carriers. In addition to the carrier's name, their customer service number and (PIC) Access Codes are also listed.

CARRIER NAME	PHONE	10XXX PIC CODE
Advantage Telecom	(800) 576-0076	10239
American Telephone Network	(800) 264-0704	10648
AMNEX	(800) 735-4900	10370
AT&T	(800) 235-0367	10288
Cable & Wireless	(800) 790-5300	10223
CallAmerica (GST)	(805) 541-6316	10344
Capital Network Systems (CNS)	(800) 777-6577	10425
CTS (WXL)	(800) 569-8700	10834
Cyberlink (RSL)	(800) 266-2006	10618
ECI	(800) 879-1375	10327
Excel	(800) 875-9235	10752
Frontier	(800) 878-6260	10211
LCI Intl.	(614) 798-6492	10432
Long Distance Savers	(800) 256-4491	10036
MCI	(800) 289-0073	10222
Midcom	(800) 497-8000	10648
Network LD	(800) 864-9064	10765
ONCOR	(800) 825-5533	10658
OSC	(800) 658-2143	10891
Sprint	(800) 877-2000	10333
Teltrust	(800) 530-3222	10485
Transnational	(800) 225-7678	10410
Trescom	(305) 463-4884	10848
U.S. Long Distance (USLD)	(800) 460-0541	10300
Vartec	(800) 583-8832	10811
XTEL	(800) 438-9835	10924
WilTel (WorldCom)	(800) 364-4000	10555
WorldCom (LDDS)	(800) 539-2000	10432

📌 [For a complete list of 10XXX PIC Codes Click Here...](#)

WHO'S THE BIGGEST?

The following figures were compiled by the F.C.C. based on official data. The chart shows annualized revenues for each of the country's largest long distance companies and ranks them accordingly. The first figure represents the company's total annual revenues for the year in millions of dollars. The second figure ranks companies by the total percentage of the entire long distance market (in revenues) each one holds. This represents the company's market share in respect to annualized revenues (size). For the first time, this report also lists long distance resellers, in addition to carriers.

1995 ANNUALIZED LONG DISTANCE REVENUES

CARRIER NAME	\$ Million Revenue	Revenue Market Share
AT&T	\$38,394	52.99%
MCI	12,924	17.84
Sprint	7,277	10.04
LDDS/WorldCom	3,640	5.02
Frontier	1,396	1.93
Cable & Wireless	700	.97
LCI	671	.93
Excel	363	.50
Telco Group	215	.30
Midcom	204	.28
Tel-Save	180	.25
USLD	155	.21
Telegroup	129	.18
Vartec Telecom	125	.17
GE Exchange	120	.17
General Comm Group	120	.17
MFS *	118	.16
BTI	115	.16
CTS	115	.16
Oncor	111	.15
Furst Group	109	.15

AMNET	101	.14
OTHERS	5,168	7.13
TOTAL ALL CARRIERS	\$72,450	100%

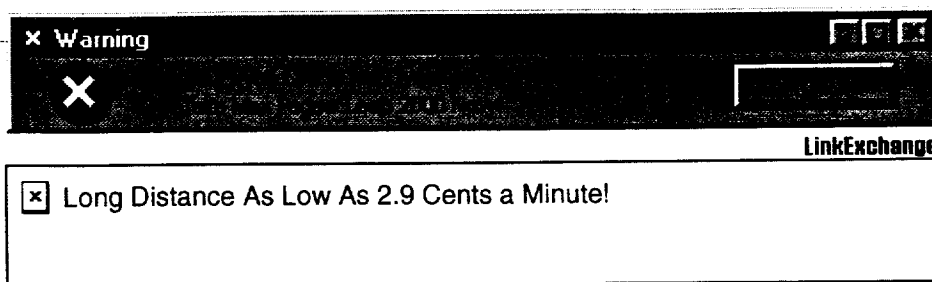
* MFS was recently purchased by LDDS/WorldCom.

THANKS!!!

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Jeff Bornstein
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Bob Schwartz
Sharon Ziebart

 [Back to DLD Digest Home Page](#)



Translate this page from English to French Translate

What are you paying for long distance?

Don't be Misled by Gimmicks, Misleading Ads or Deceptive Offers from some Long Distance Companies!

Amazingly, 70% of the calling public still pays standard direct dial rates when calling long distance from home. Many long distance companies use these standard rates as a basis for their percent-off plans. These rates average 28-29 cents per minute during the day (usually billed in full minute increments) and are not discounted at all, making them the highest in the industry. The next time some one offers you a discount, ask them what they are discounting from! Tell them to forget the "fancy talk" and cut to the chase. What is the actual cost per minute? Are there any hidden like recurring monthly fees, full minute billing or long-term commitments? If you are still with one of those old plans, it's time to get yourself a better deal!

Don't fall for the gimmicks, misleading ads or deceptive offers made by many long distance companies. You must listen to the ads carefully for restrictions and read the fine print to find hidden fees and hidden minimums. And, you must ALWAYS check the INTRASTATE rates within your own state. Many carriers make a huge profit from inflated intrastate rates because the consumer only sees the teaser INTERSTATE rate advertised.

SUMMARY INTERSTATE AND INTRASTATE RATES; THAT'S U.S. AND STATE RATES.

Interstate (between states) rates vary by carrier, but with few exceptions (Alaska and Hawaii) when a telephone carrier quotes a 9.9 cents per minute rate, it is good for all states. It doesn't matter if you are in Connecticut, Florida, California or Texas, the interstate rate is the same. But that rate does NOT apply to the intrastate rates. Interstate rates are calls between states, i.e. California to Oregon; Florida to New York, or Texas to Alaska. Intrastate calls (also called in-state) are calls within your state, i.e., Los Angeles to San Francisco, Pittsburgh to Philadelphia and Dallas to Houston. When a carrier quotes an interstate it generally is valid for all states (except, on occasion Alaska and Hawaii). If a carrier states a \$0.099 interstate rate, that telephone rate is good in Maine, Idaho and Missouri. It is important to understand the cost components of a long distance call. Essentially, there are 3 costs: Origination Leg: The price the Local Exchange Carrier (LEC) charges to connect the caller's telephone to the long distance carrier, also known as the InterExchange Carrier (IXC). Long Distance Leg: This is the "transport" or long haul portion of the call, which can consist of anywhere from a few dozen miles to thousands of miles across the country or the world. Termination Leg: The reverse of the Origination leg. This is the rate per minute that the receiver's LEC charges to connect their telephone to the IXC. Your interstate rate is a combination of these 3 costs.

However, this same logic does not apply to intrastate (long distance calls within your state) calling. All 3-legs on an intrastate call are usually handled by the same carrier. Intrastate rates vary widely (!!!!) by state. Please note that with many carriers, it is cheaper to call across the country, than across the state. It doesn't make sense, but that is the way it is (I don't think the Shell Answer Man, Mr. Peabody or a MENSA member even knows the reason why). Good examples of the price fluctuation are California (intrastate rates from \$0.049 to \$0.129) and Maine (intrastate rates as high as \$0.459). It pays to shop the intrastate as much as you do the interstate rate. [Click here to see intrastate rate tables](#)

The only thing that really matters is the

NET COST PER MINUTE!

Get your last bill and a calculator, divide the time into the amount for each call. See what you're really paying!

You need to factor in any fees, surcharges and minimums. Some long distance companies don't make it easy. Always read the "fine print" for hidden charges.

*** * Click here to see my Tips on receiving the lowest cost service * ***

*** * Click here to see an explanation of FCC mandated Fees (USF, PICC, SLC) * ***

*** * Click here to Search for the lowest rates to meet your personal needs * ***

*** * Click here to see intrastate rate tables * ***

Let's take a closer look at some typical offers from long distance companies:

Links: [AT&T](#) [MCI](#) [1-800-COLLECT](#) [AOL](#) [VarTec](#) [TELECOM](#) [PEC](#) [SNET](#) [Various Others](#) [Dial-Around-Services](#) [Calling Cards](#) & [Cellular](#)

SPRINT

Sprint is now a part of MCI Worldcom.

NICKLE NIGHTS, 5¢ a minute from 7PM to 7AM (5PM in Ca.), and 10 cents at other times, People who sign up for Sprints cheap rate must pay an additional \$5.95 a month. While the rates are bargains for frequent long-distance callers, average users might wind up paying more, not less, consumer groups warned.

Sprint's WEEKEND SPECIAL:, 1000 minutes for \$25, calls made from 12am Saturday to 11:59pm Sunday, 5 c/m for calls over 1000 min. and 10 c/m for calls made other times.

Sprint Sense Anytime: Dime a minute rates 24 hours a day, 7 days a week state to state calling. There is a monthly charge of \$4.95 unless your bill is \$30 a month for long distance.

Also Sprint bills in full minute increments. This typically adds an average of 5% to the cost of your long distance, as the final minute is rounded up to the next minute, even if you only use one second of the final minute.

Sprint also has a service called "800-ONE-DIME", which looks exactly like 1-800-collect by MCI. These services offer collect calls for 10¢ a minute from 7:00pm to 7:00am and 25¢ a minute from 7:00am to 7:00pm. with a surcharge of \$1.59.

AT&T

AT&T touts its one-price rate of 7¢ per minute (24/7), There is also a \$5.95 monthly service charge. AT&T has another plan: AT&T One Rate @5 cents/min. This is for direct dialed state-to-state calls,

24 hr / 7 days. But the monthly fee is \$8.95.

But these rates are still HIGH! AT&T bills in full minute increments! This typically adds an average of 5% to the cost of your long distance, as the final minute is rounded up to the next minute, even if you only use one second of the final minute. While the rates are bargains for frequent long-distance callers, average users might wind up paying more, not less, consumer groups warned. AT&T also lures customers to their service using "incentive" checks typically in the amount of \$50.00 - \$100.00. Many people take advantage of this offer, but some fail to realize that the tempting incentive can be "eaten away" by AT&T's MUCH higher long distance rates. Some also believe that once they accept these "incentive" checks that they are "locked in" to AT&T for a specific period of time. AT&T claims that there is no commitment of any period of time that customers have to remain with AT&T, when accepting these checks. We have had customers who cash these checks, switch to AT&T, then call us back to have us switch their accounts to our lower cost providers!

MCI

Now known as MCI Worldcom (and also owns Sprint). MCI has 3 basic plans:

MCI 5¢ Everyday Savings: 5¢ a minute every evening Monday - Friday on state-to-state calls from home 5¢ a minute Saturday and Sunday on state-to-state calls from home 25¢ a minute Monday-Friday from 7:00 a.m. - 6:59 p.m. \$1.95 monthly fee, \$5 monthly minimum This would be great if people made all of their calls on off hours. Most people like the flexibility of making long distance calls at THEIR convenience, not when the carrier dictates.

MCI One Savings: Sunday 5¢ a minute, Evenings & Saturday 10¢ a minute, Weekdays 25¢ a minute. \$5 monthly minimum applies.

MCI One NET: For online customers only, all billing done online, Sunday 5¢ a minute, all other times 9¢ a minute.

1-800-COLLECT

This is a service of MCI. They are now advertising 10¢ a minute for collect calls made through this service. What you may not see during the TV commercials (because the print is so small and flashes across the screen so quickly) is that this 10¢ a minute rate is valid only from 7:00pm to 7:00am and carries a service charge of \$1.59. During peak hours, the rate is 25¢ a minute and a fee of \$1.59. Sprint is also offering this same "deal" on their 800-ONE-DIME plan.

AOL - AMERICA ONLINE

The interstate rate is a competitive 9¢ per minute, but you are billed by credit card! You can only view your bill online, and if you want a hard copy sent by mail, you must pay an extra fee! If you leave AOL, you can have them switch you to TALK.com, the new retail mark of TEL-SAVE (AOL's carrier). Intrastate rates are 30 to 50% higher than the competition (Ca. intrastate rates are good however and the calling card plan seems decent) and International rates are also high, unless you want to pay \$3.95 per month extra for lower International rates. They also bill in rounded up whole minutes. As of 6/98 they offer no toll free service.

"VarTec's 5Line 1010811"

Since their low dialaround rate only apply to calls over 10 minutes, to take advantage of this plan, you would need to make all of your calls 10 minutes or more in length. Advertised at 5 cents a minute, the fine print reveals several restrictions that puts the average user at a obvious disadvantage. Answering machines, faxes, wrong numbers-all would cost you \$.50 each under this plan! If you add in the Universal Service Fee at 4.9%, your cost per minute comes to 52.5cpm! WOW...even using 200 minutes a month would only be a rate of 5.25cpm! Not 5cpm in our book! There has been much in the media about these marketing practices. We think that these types of marketing tactics are an insult to the informed consumer.

Telecom USA / "10-321"

This is actually a division of MCI. Their advertisements claim to save you up to 50% on calls lasting

20 minutes or more. More deception! The 50% savings is based on their own inflated rates. For example, a call from Atlanta to Los Angeles made during peak hours (8:00am to 4:59pm) would cost 31¢ per minute. If your call lasts 20 minutes or longer, the rate drops to 16¢ per minute. If your call is placed between the hours of 5:00pm and 10:59pm Monday through Friday, the rate is 19¢ per minute. If you talk 20 minutes or more the rate drops to 10¢ per minute. The "savings" on these two are actually less than 50% off their own inflated rates. When you call between 11:00pm to 7:59am Monday through Friday, or Saturday from 8:00am to Sunday to 4:59pm, your rate is 16¢ per minute, and 8¢ per minute after 20 minutes. This looks like another one to avoid. Not only do they have four separate rate time periods, but the rates vary from state to state (typically 29-31¢ per minute M-F, 8:00am to 4:59pm) further complicating their plan. You can call their automated pricing line at 1-800-476-1234 if you would like to hear more about their "bargains". Lastly, aside from the dubious savings, would you really want to be obligated to 20 minute calls in order to receive a "discount" ?

note: The April 16, 1997 edition of the Wall Street Journal, profiles this marketing practice by MCI.

PEC (Planet Earth Communications)

PECLD, 2 options:

1) For state-to-state calls, you can choose the low 6.9 cents per minute rate. This rate has a monthly minimum usage of \$10.00. 2) If you do not spend at least \$10.00 in long distance during the month, you can instead choose the 7.9 cents per minute rate. This rate has no monthly fees and no minimum usage. For both plans you will be billed the low listed rates for intrastate and international calls. The carrier is IXC, a "carrier's carrier" offering an extensive worldwide fiber-optic network for calls originating in the 48 Continental US States. Information about your phone calls will be updated DAILY on a special password protected website which will be provided to you by PEC (Planet Earth Communications). For an additional savings and convenience, billing is done by credit card, no postage to pay!

Planet Earth True Cost Long Distance from 2.9¢ per minute Outstanding (USA origination) service, featuring low international and intrastate rates. Online signup. For commercial and residential users. Web call details, updated every 6 hours. Automatic credit card payment. No monthly billing fee. Note 1 - There is a minimum amount of \$5.00 that can be charged to a customer's credit card. If usage + taxes is less than \$5.00, then the credit card will be charged \$5.00 and the remainder will be carried forward into the next month as a credit. Note 2 - All calls are billed in 6 second increments after the first minute

SNET

SNET (Southern New England Telephone), typical of regional telephone companies, offers several plans. With the SNET Automatic Savings Plan, you can receive long distance rates as low as \$.10 per minute based on the volume of your long distance calls (in-state, out of state and international) made each month. Direct Dial per minute rates vary depending on the total dollar value of long distance calls made during your monthly billing cycle. Rates \$ 0.00 - \$24.99, 0.15¢ per minute - \$25.00 - \$49.99, 0.12¢ per minute - \$50.00+ 0.10¢ per minute Additional benefits include: One second rating (calls are rounded up to the next second) - 18 second minimum billing per call, No monthly recurring charge, No installation charge. Available to SNET local service customers only.

"The REAL Long Distance Rates Comparison"

Below is a brief summary of the residential Long Distance rates extracted from the Yahoo page Long Distance Telephone references. This is my best effort after hours of poking hypertext links and writing down notes. No warranty as to correctness is made or implied, blah blah blah, CYA. If you have found an error, or have more information to be included, please e-mail me, elrond@longdist.net, with the company, rates, and a URL I can use to verify the information.

Rates from Web Pages of Companies in Yahoo:

Rates are in cents per minute. Some are flat rates, others have different prices for peak vs. off-peak times. Fees & minimum charges are noted where they were expressed clearly in the web page.

Generally, rates apply only to INTERSTATE calling. Calls within a state are, paradoxically, MORE

expensive in general.

AmeriCom Long Distance@ (2) Simplicity: 8.9 interstate \$1.95/month fee. Includes 800#@8.9 interstate. INTRASTATE RATES NOT LISTED.

American Telecom Network (ATN) 9.9 cents/min interstate, 6 second billing, no other fees listed. Also has an 800 service plan @9.9 interstate. INTRASTATE RATES NOT LISTED. Has good calling card plan, 14.9 cents/min+ no other fees. Uses a division of MCI as a carrier.

AT&T@ 7¢ FLAT interstate, \$5.95/month fee. Intrastate rates not given.

Excel Telecommunications@ Various plans. Monthly fee of \$1, gets 10 cents/minute interstate in all states. Monthly fee of \$4.95 gets 7 cents/minute. Monthly fee of \$5.95 gets 3 c/m between 7pm-7am (10 c/m 7am - 7pm). Intrastate rates are higher.

Long Distance Telecom 9.9 Flat interstate, various intrastate, \$4.95 fee if bill less than \$50/month.

MTX Communications 9.1 Flat Intrastate, fee not mentioned, intrastate rates not mentioned.

National Phone Lines Telecommunications Broker , (800) 524 4736 BUSINESS ACCOUNTS ONLY! \$50/month commitment to term contract gets 8.0 flat interstate. Some intrastate rates shown on page. One Flat Rate 7.5 flat interstate, check intrastate rates, slightly high. no fees, 6-second billing w/ 18-second minimum.

ProDial 9.9 flat rate 6 sec billing, 18 sec minimum interstate. 800/888# at same rate. Intrastate: CA 5.9, NY 11.5.

Qwest's Q.Home(sm) PICC and USF charges apply. 2 plans: Qwest Communicator 5 cent/min + \$9.95/mo, Instate rates vary, requires credit card billing. Calls from pay phones receive an additional 30 cent payphone charge. 10¢ per minute, no surcharge calling card, Calling card calls made from a payphone receive an additional 30¢ payphone surcharge. Qwest Countdown: Automatic interstate rate decreases. Pay only 9¢/m at start and the rate drops ½ cent every 90 days to 5¢ per minute, (takes 25 months). weekend rate is 5¢/ m. \$4.95 monthly fee(waived if credit card billed). Calling card: 30¢ per minute, \$.99 per call payphone surcharge.

Intrastate rates vary, check!

6.9¢ Qwest Q.Biz 1+ and Toll Free Service low international and intrastate rates. Online signup. Commercial accounts only. One second billing. \$25/month minimum usage. No monthly billing fee. 5.9¢ Unitel/Frontier Long Distance 5.9¢ interstate rates. (intrastate rates low, but others are lower!) Online signup. For commercial and residential users. Billed to your local phone bill - No monthly billing fee. Not available to all locations

SM Communications And Marketing (SMCM) 9.9 flat interstate. No fees. 6 second billing. 800/888# at same rates. Intrastate rates not listed.

International Service Only

KallCents International Telecom - Kallback

KDD@ (2)

MTC Long Distance Services International and credit cards.

Cyberlink with clear exposition of its International rates.

Callback and Web-Based Services

CALLNOW.com Worldwide calling, online signup. Make calls 15 seconds after you sign up INSTANT gratification - what the web is all about!

Cross Communications Our best international callback service. Featuring exceptionally low rates; no monthly fee.

KallBack The original call re-origination service

Net2Phone Worldwide IP Telephone Service

HT-NET Internet Based FAX send/receive. Rates start at \$9.95/month. Ideal for non-USA based companies to send FAXes to the USA!

NetCall Worldwide Prepaid IP Telephone Service

Visit Cognigen Communications Services to see various discount plans available.

"How the Major 10-10 Services Compare"

From Consumer Reports, May 1999 : "Depending on the dial-around service you chose, there can be a world of difference in what you pay for longdistance calls. Some purported savings evaporate when you read the offers carefully."

In an article written by Jane Bryant Quinn in the Washington Post, she discusses these "dial-arounds" and mentions that AT&T sued VarTec Telecom and another company called Telco claiming misleading advertising practices. Also, The Tele-Consumer Hotline, an impartial, independent, non-profit consumer education service, warns against using such "dial-arounds" in an article from the Discount Long Distance Digest.

The Code	Who's Behind It	The Claim	The Catch
10-10-321	MCI Telecom USA	Interstate: Save upto 50% for calls 10 minutes and longer, (8¢/m for calls 10 min or longer - 16¢/m for calls under 10 min.)	Discount is off the most expensive "basic" rates. (10 min. call= \$.80, 9 min. call=\$1.44)
10-10-220	MCI Telecom USA	99-cents for upto 20 minutes	If your call lasts less then 20 minutes, you still pay 99-cents
10-10-345	AT&T Lucky Dog	10 cents a minute	10-cent connection fee per call
10-10-811	VarTec Telecom	5-cents a minute	10-minute minimum charge, plus 4.9% for universal-service fund
10-10-297	Excel Telco	10-cents a minute	Add 4.4% for universal-service fund
10-10-432	Qwest	20-cents a minute during peak hours, 9-cents off-peak	Add 93-cents for universal-service fund per month
10-10-6868	PT-1 Communications *	7.9-cents a minute	Add 3.9% for universal-service fund
10-10-629	WorldxChange *	9-cents a minute	for details call the company at 800-569-8700
10-10-275 or 10-10-502	WorldxChange *	5-cents a minute for first 60 days, then 7-cents a minute	\$4.95 monthly fee, plus \$1.49 for universal-service fund
<u>1016444</u>	PromiseNet - Cognigen	Flat rate (USA origination) residential and commercial service, featuring Deeply discounted international rates No switching (1016444 dial-around) \$0.089/minute USA interstate flat rate LOW intrastate USA rates	Must register to use this service, check intrastate rates before signing up
<u>KallCents</u>	International Telecom - Kallback	Flat rate (USA origination) residential and commercial service, featuring Deeply discounted international rates No fees, No switching (800 dial-around)	credit Card billing, must be registered user, NO posted intrastate rates

*** service not available in all markets**

**** Click here to Search for the lowest rates to meet your personal needs ****

This barrage of misleading ads has made for much confusion for the general consumer. In fact, most people don't really know what their per minute rate is. I have checked the various plans and waded through the hype to locate what I think is the best price and highest quality service. Check these out!

☒ 6.9 Cents a Minute Long Distance

☒ Long Distance As Low As 2.9 Cents a Minute!

* **THE INFORMED CONSUMER** *

IS OUR HAPPIEST CLIENT!

IMPORTANT NOTICES

1. When switching long distance companies, many local companies will bill you a one time service charge, usually around \$2. Email me with local company name and amount, I'll build a table with this data.
2. Federal Communications Commission charges, collected by all phone companies. Universal Service Fund (USF). Presubscribed Interexchange Carrier Charge (PICC). Subscriber Line Charge (SLC). Click here [FEES](#) to review this data.
3. **TAXES:** typical taxes you have to pay include; State sales tax, federal tax of 3%, surcharges such as - E911 availability, service fund, number portability service.
4. If you believe you have been ripped off by a long distance carrier, you can now file a complaint with the Federal Communications Commission over the Internet. Click here: [Complaint](#)

[Return to top](#)

Calling Cards		
Service Name	Description	Calling From > To
<u>Global Direct</u>	Flat rate (USA origination) featuring Deeply discounted international rates. No access or per call fees. INCREDIBLE for cellular int'l calling. NO PIN #'S required!	U.S. > Worldwide
<u>VoCall Five Cent Phone Card</u>	Our best international calling card (US origination) \$0.05/minute USA rate. \$0.12 Mexico, \$0.12 Moscow, and other discounted international rates. Not rechargeable. Quantity discounts available	U.S. > Worldwide
<u>India Worldwide Direct</u>	Specialized India Calling Card (US origination) \$0.50/minute India rate, \$0.62 Pakistan, \$0.62 Bangladesh. Not rechargeable. Quantity discounts available	U.S. > India, Pakistan, Bangladesh
<u>AccuLinQ</u>	Monthly billed Calling Card 9.9¢ Domestic flat rate Deeply discounted worldwide rates	48 U.S. > Worldwide

	rates No per-call surcharge - six second billing	
<u>USATel</u>	Rechargeable Prepaid Calling Card 14.9¢ domestic flat rate, Deeply discounted worldwide rates. No per-call surcharge	48 U.S. > Worldwide
<u>RoadTel</u>	Monthly billed Calling Card 14.9¢ Domestic flat rate. Deeply discounted worldwide rates. No fees (just \$3.95 activation). No per-call surcharge - six second billing	U.S. > Worldwide
<u>MCI Prepaid Outlet</u>	Prepaid Calling Card Domestic flat rate. Deeply discounted worldwide rates. Discounts for volume purchases. No per-call surcharge	Many Countries > Worldwide
CELLULAR PHONE SERVICE		
<u>Nationwide PCS/Cellular Services</u>	The finest in cellular/PCS systems through providers like AT&T, ALLTEL, Airtouch, CellularOne and more! You can enjoy calling plans that fit your individual needs at a price you can't beat! These calling plans start at just \$9.95 a month with additional features like NO long distance and NO roaming charges!	Local, Long distance, and Roaming service.
<u>TRACFONE prepaid cellular service</u>	With a Tracfone cellular phone you can make and receive calls, local or long distance. Unlike other cellular and wireless phones, with TracFone you just pay as you go. There is NO MONTHLY ACCESS, NO CONTRACTS EVER, NO CREDIT IS NEEDED. Prepaid cellular service by purchasing Tracphone airtime cards on their website.	Local, Long distance, and Roaming service.
Travel Services		
<u>Get Rebates on all your Travel</u>	Globion Travel Opportunity	Worldwide!
Edutainment and Internet Services		
<u>Dish Network</u>	Direct Broadcast Satellite Television Service.	fastest growing direct broadcast satellite television service in the United States with the capacity to offer 500 channels to a single dish across the nation.
<u>WarpSpeed Hosting</u>	Custom Domain Web Hosting.	High Bandwidth Professional Quality!
<u>Whitworth's Planet Earth</u>	Award winning Edutainment CD for ages 5 to 99.	Worldwide!
<u>\$14.95 Internet</u>	USA Nationwide 56KB ISP.	Many Local Access Numbers!
<u>World OnLine Digest</u>	The Internet Unplugged Kid Safe Web surfing and more.	Worldwide!
<u>BigSubmit</u>	Submit your web site to over 900 sites in nine categories	Worldwide!
<u>SoundSenter</u>	Custom Voiceovers To enhance your websites. Choose from many voices and languages.	Worldwide!

Internet Service



\$12.95 per month, unlimited 56k service:
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\$25 setup fee waived until 8/31/99

[Check Access Numbers](#)

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Paying \$15, \$20, \$25, or more per month for internet service?
Check out [FreeWWW.com](#), **TOTALLY FREE INTERNET SERVICE**: no setup fee and NO additional fees ever for unlimited monthly service. NO banners !. You also receive a free E-Mail account. A nation wide service with V90 56k access. If you do not need the bells and whistles of AOL and others, check it out.

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fast URL provided free by



E-Mail at elrond@longdist.net, if you have any questions or comments.

Visit my message board



	<p>Marketing games and Gimmicks used by many long distance companies to confuse the public. Find true savings.</p> <p>Summary of Rates used by Long Distance Companies</p>	
-------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

Place your FREE advertisement and/or banner: "<http://www.FantasticLinks.com/BH3821>"
Visit [Cognigen Communications Services](#) to see various discount plans available.

last updated 01/20/2000

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COMMUNICATIONS

In this section:

BEST BUYS

Long Distance

SO YOU COULD HAVE jetted off first-class and spoken to your friends in person for what you've spent on long distance phone calls lately. And now you can barely afford to scrape together enough postage to mail your latest news. Aren't there any cheaper long distance plans out there?

Probably. But you'll have to sort through the offerings of more than 600 providers. That's up from 430 five years ago, according to the Federal Communications Commission. And the increased competition is forcing many long distance companies to lower their prices. "There's more (phone) capacity than they can sell and lots of new carriers. The large guys have had to respond," says Marc-David Seidel, co-founder of [A Bell Tolls](#), a clearinghouse for calling plans. These days the average long distance rate is about 10 cents a minute, according to K.C. Choi, a senior research associate at the [Telecommunications Research and Action Center](#) (TRAC). But there are also plans charging as little as five cents. If you're paying more, it's time to go long distance shopping.

Here's how to find the plan that's right for you.

Getting Started

The first thing you need to do is get out a couple of recent phone bills and itemize your average monthly long distance use. Break your usage down into five categories:

- Number of minutes Monday to Friday, 7 a.m. to 7 p.m.
- Number of minutes Monday to Friday, 7 p.m. to 7 a.m.
- Number of minutes on Saturday.
- Number of minutes on Sunday.
- Number of minutes to the most often dialed country or phone number.

This information will help you evaluate what you would pay for phone calls under various plans. Next, you've got to get a list of what's available. With hundreds of long distance providers offering their own selection of plans, this task can be daunting. But we found three Web sites that will do a lot of the work for you.

Broker Ratings**Planning**[SmartMoney Tips](#)[Autos](#)[Best Buys](#)[College Planning](#)[Home Ownership](#)[Insurance](#)[Retirement](#)[IRA Corner](#)[401\(k\)](#)[Estate Planning](#)[Tax Guide](#)[Debt Management](#)[Interest Rates](#)**More Features**[Search](#)[Personalize](#)[Alerts](#)[Tools](#)[Help](#)**A Bell Tolls**

This is a good place to start your search. The [site](#) has the most comprehensive and up-to-date listing of long distance plans that we found on the Web. Its [Interstate Long Distance Rate Comparison](#) includes the details on about 80 different calling plans from providers ranging from [AT&T](#) to [Planet Earth Communications](#). You can rank the plans by peak, off-peak, Saturday and Sunday rates, as well as by monthly fees and monthly minimums.

If none of the carriers listed here satisfies you, you can link to the Web sites of additional carriers from the site's [Long Distance Providers](#) page. If you go this route, you'll have to do the rate and fee comparisons yourself.

TRAC's WebPricer

Another good tool for long distance shopping is TRAC's WebPricer. Just enter the numbers you call most often along with the time of day you call. The site will compare the rates offered by [AT&T](#), [Excel](#), [Frontier](#), [Qwest](#), [MCI WorldCom](#) and [Sprint](#). You'll get a list of calling plans ranked by the total cost of the phone calls you submitted, plus the individual rates for each call. You should note that monthly recurring charges are not included in the rankings. So you'll have to do your own follow-up with each provider, collecting information on monthly fees, minimums and other special charges. (You'll find more on this in our [Evaluating Fees](#) section below.)

Webpaggers.net

At [Webpaggers.net](#) you'll find a good tool for pricing international long distance rates. Select the city or region you're calling from and the country you are calling, then choose a call duration. The calculator will provide a list of rates and total costs from as many as 14 long distance providers.

A word of warning: As you collect rate information, don't assume that the further the call, the higher the price. Intrastate calls often cost more than state-to-state calls. So, be sure to get the rates for each type.

Evaluating Fees

The price per minute of a phone call is not the only issue, advises Samuel Simon, founder of the TRAC. "Today, fees and surcharges are rapidly becoming a large part of the long distance bill." Indeed, a recent TRAC study found that monthly fees can make up a hefty 20% of a bill for low-volume telephone users.

Those fees include things like the Universal Service Fund (USF) charge, monthly maintenance fees and monthly minimums. The rate-comparison tool at A Bell Tolls includes information on most of these fees. But you should always confirm rates and fees with the carrier before signing up for a long distance plan. Here's the lowdown on the biggest recurring charges.

USF and PICC Fees

These charges are sometimes bundled together. The USF is a 3.9% federal tax on your monthly phone bill. It is used to finance telecom-related programs for schools and disadvantaged communities. PICC (Pre-subscribed Inter-exchange Carrier Charge) fees are paid to local phone companies for connecting your phone calls from home to your long distance provider.

Startup Fees

There's no reason to pay any fees when switching to a new long distance provider. The most common -- a \$5 fee charged by your local carrier when you switch -- is usually absorbed by your new long distance carrier. If your new carrier doesn't offer to pick up the tab, ask. Chances are, the carrier will cover the \$5 cost.

Monthly Fees

Monthly fees come in two varieties: flat fees you pay simply to have the long distance service and monthly minimums.

Flat monthly fees can run as high as \$25 and may make sense for heavy phone users. The Qwest High Spender plan charges \$14.95 in flat monthly fees but it has a low five-cent flat rate for phone calls. Sprint's Unlimited Weekend plan charges \$25 a month, but comes with free, unlimited weekend service.

If you're a moderate phone user, you should probably shop for a plan with no monthly fees. Plenty of carriers have them including AT&T, [WorldxChange](#) and [Vartec](#).

Monthly minimums are a base amount you'll be expected to pay, even if you don't use long distance service. They generally range from \$3 to \$15 per month, but once again, there are plenty of plans, such as [AccuLinQ](#) and AT&T's [Lucky Dog](#), that don't charge them.

Billing Minimums

Look for plans that charge in small increments like six seconds. Unfortunately, the biggest carriers tend to use one-minute increments. That means if you only talk for, say, 30 seconds, you will pay for a full minute. But competitors like [Telegroup Spectra](#), the [ATN Ultracard](#) and [Earthtones](#) use six-second increments.

Most carriers also charge minimums for each phone call, according to Seidel. And sometimes you will have to weigh the benefit of short increments against the cost of a minimum. For instance, Qwest offers a one-minute per call minimum, then charges in one-second "exact billing" increments for its Juno plan.

Further Strategies for Cutting Your Long Distance Bill

Pay by Credit Card

"Online plans tend to give a little more aggressive rates," explains TRAC researcher Choi. "The reason being you cut out functions like mailing and processing." [WorldxChange](#)'s "I" billing plan trims monthly bills by 5% if you sign up for automatic credit card billing. MCI's One Net Savings Plan, which requires credit card billing, charges a flat nine cents per minute and five cents on Sundays.

Use 10-10 Dial-Around Codes

Even though your plan might be the cheapest for the calls you make most often, it pays to shop around before making an unusual long distance call, like phoning Belize at midnight.

This is an ideal time to use a 10-10 dial-around code, which will route your call via a different long distance carrier. Use the tool on [Webpagernet](#) to find the cheapest rate. Then, check out the list of 10-10 codes on [A Bell Tolls](#). You can also get these codes from TRAC.

Some companies, like MCI WorldCom, won't let interlopers use their cheapest plans. But other providers, such as [WorldxChange](#), will let you capitalize on their best fares. Confirm the rate before using a 10-10 code. You can usually check via a toll-free customer-service number, which you should be able to find using directory assistance (800-555-1212).

Check Calling Card Rates

Your carrier might offer great prices when you call from home. But double-check the rate before using your carrier's calling card away from home. Sometimes the rates are higher than you'd expect. For information on choosing a calling card, see our [Best Buy: Calling Cards](#).

Monitor Your Account Online

It's still not common, but long distance providers are starting to offer online account information that allows you to monitor your spending each month. [Planet Earth](#) has daily online account updates.

Frontier, AT&T's [One Rate Online](#) and Qwest also provide online billing information that is updated monthly.

Check Out Your Carrier

Some long distance companies are more reputable than others. So before signing up with a carrier you've never heard of, download the FCC's free [online scorecard](#) to find out about consumer complaints filed against the carrier.

In this section:

[Long Distance Service](#) | [Long Distance Calling Card](#) | [Cellular Provider](#) | [Internet Phone](#) | [Internet Service Provider](#)

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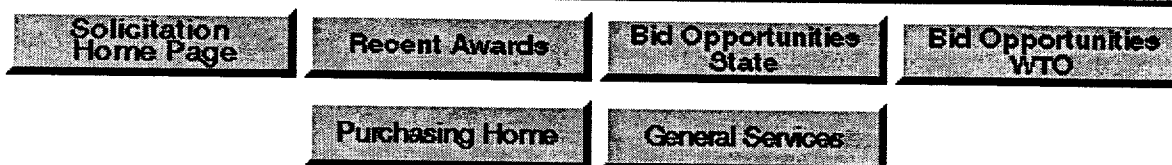
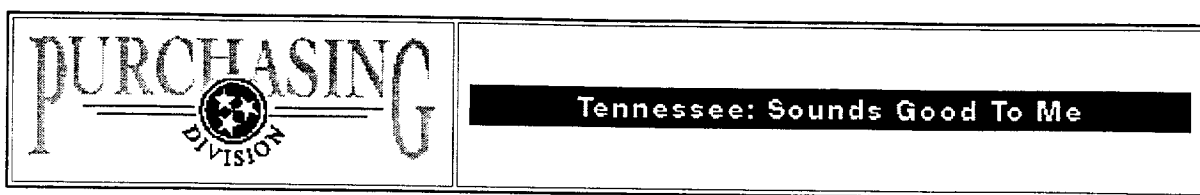


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Contracts

ACTIVE STATEWIDE CONTRACTS

Last Updated 02/09/00, 08:57:17

Statewide Contract No.: 3048	Title: TELEPHONE SERVICE, TOLL FREE RESTRICTED
----------------------------------------	-------------------------------------------------------

Contract Period From: **08/01/99** To: **07/31/00**Commodity Code Number: **938-39**Solicitation No: **2040410**

Contact the following in the order named in the event of questions pertaining to this contract.

Contract Administrator and Phone: **JIM BELL (615)532-2314**Buyer Supervisor and Phone: **JAMES E. BRYANT (615)741-6831**

The following terms, listed either partially or in their entirety, pertain to all individual contracts under this SWC number. Specifications, if present, will follow the terms and conditions. Please refer to the actual contract document for the entire list of the terms and conditions and complete specifications.

Vendor Name and Address	Business Ownership	Contract Details
Qwest/lci 1009 Twilight Trail #123 Frankfort, KY 40601 Vendor No: 39145580300 Vendor Contact: Bob West Contact Phone: (502)226-4737	Small: No Minority: No Woman-Owned: No	Contract No: 4021777 Payment Terms: NONE Delivery: 30 DAYS ARO Contract extended to Local Governments & State Agencies

Contract Items and Services for SWC #3048 , Solicitation #2040410

Unless specified elsewhere, ship to: Statewide

SWC No. Solicit No.	Contract No.	Line No.	Commodity/Service Description	Unit	Unit Price	Discount Off Catalog Price
3048 2040410	4021777	00001	Commodity Code: 938-39-042676 Dedicated - Charge Per Minute Interstate As Per Attached Specifications	MIN	\$0.04200	N/A

Vendor: 39145580300

Qwest/lci

Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 2040410	4021777 00002	Commodity Code: 938-39- 042677 Dedicated - Charge Per Minute Intrastate-interlata As Per Attached Specifications	MIN	\$0.04200	N/A
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Vendor: 39145580300

Qwest/lci

Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 2040410	4021777 00003	Commodity Code: 938-39- 043267 Dedicated-charge Per Minute Intrastate- Intralata As Per Attached Specifications	MIN	\$0.04200	N/A
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Vendor: 39145580300

Qwest/lci

Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 2040410	4021777 00004	Commodity Code: 938-39- 042678 Switched - Charge Per Minute Interstate As Per Attached Specifications	MIN	\$0.07000	N/A
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Vendor: 39145580300

Qwest/lci

Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 2040410	4021777 00005	Commodity Code: 938-39- 042680 Switched - Charge Per Minute Intrastate Interlata As Per Attached Specifications	MIN	\$0.07000	N/A
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Vendor: 39145580300

Qwest/lci

Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00006 Commodity Code: **938-39-** MIN \$0.07000 N/A
2040410 **043268**
Switched-charge Per
Minute Intrastate-
Intralata As Per Attached
Specifications

Vendor: 39145580300

Qwest/lci

Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00007 Commodity Code: **938-39-** EA \$0.00000 N/A
2040410 **042681**
Local Call Blocking - Per
Toll Free Number As Per
Attached Specifications

Vendor: 39145580300

Qwest/lci

Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00008 Commodity Code: **938-39-** MIN \$0.00000 N/A
2040410 **042682**
Local Call Blocking - Per
Call As Per Attached
Specifications

Vendor: 39145580300

Qwest/lci

Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00009 Commodity Code: **938-39-** EA \$0.35000 N/A
2040410 **042683**
Pay Station (coin Charge)
Surcharge - Per Call As Per
Attached Specifications

Vendor: 39145580300

Qwest/lci

Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00010 Commodity Code: **938-39-** EA \$0.00000 N/A
2040410 **042684**
Emergency Routing - Per
Toll Free Number As Per
Attached Specifications

Vendor: 39145580300

Qwest/lci

Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00011 Commodity Code: **938-39-** MIN \$0.00000 N/A
2040410 **042685**
Emergency Routing - Per
Call As Per Attached
Specifications

Vendor: 39145580300 **Qwest/lci** Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00012 Commodity Code: **938-39-** EA \$0.00000 N/A
2040410 **042686**
Blocking Originating Calls
- Per Toll Free Number As
Per Attached Specifications

Vendor: 39145580300 **Qwest/lci** Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00013 Commodity Code: **938-39-** MIN \$0.00000 N/A
2040410 **042687**
Blocking Originating Calls
- Per Call As Per Attached
Specifications

Vendor: 39145580300 **Qwest/lci** Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00016 Commodity Code: **938-39-** EA \$0.00000 N/A
2040410 **042690**
Originating Routing - Per
Toll Free Number As Per
Attached Specifications

Vendor: 39145580300 **Qwest/lci** Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00017 Commodity Code: **938-39-** MIN \$0.00000 N/A
2040410 **042691**
Originating Routing - Per
Call As Per Attached
Specifications

Vendor: 39145580300 **Qwest/lci** Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00018 Commodity Code: **938-39-** EA \$0.00000 N/A
2040410 **042692**
Holiday Routing - Per Toll
Free Number As Per
Attached Specifications

Vendor: 39145580300 **Qwest/lci** Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00019 Commodity Code: **938-39-** MIN \$0.00000 N/A
2040410 **042693**
Holiday Routing - Per Call
As Per Attached
Specifications

Vendor: 39145580300 **Qwest/lci** Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00020 Commodity Code: **938-39-** EA \$0.00000 N/A
2040410 **042694**
Time Of Day Routing - Per
Toll Free Number As Per
Attached Specifications

Vendor: 39145580300 **Qwest/lci** Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00021 Commodity Code: **938-39-** MIN \$0.00000 N/A
2040410 **042695**
Time Of Day Routing - Per
Call As Per Attached
Specifications

Vendor: 39145580300 **Qwest/lci** Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00022 Commodity Code: **938-39-** EA \$0.00000 N/A
2040410 **042696**
Percentage Routing - Per
Toll Free Number As Per
Attached Specifications

Vendor: 39145580300 **Qwest/lci** Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00023 Commodity Code: 938-39- MIN \$0.00000 N/A
2040410 042697
Percentage Routing - Per
Call As Per Attached
Specifications

Vendor: 39145580300

Qwest/lci

Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

3048 4021777 00030 Commodity Code: 938-39- PCT \$0.00000 106%
2040410 042704
Universal Service/access
Fee - Toll Freetelephone
Service As Per Attached
Specifications

Vendor: 39145580300

Qwest/lci

Recycle Content:
N/A

Contract extended to Local Governments & State Agencies

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AWARD

STATE OF TENNESSEE

DEPARTMENT OF GENERAL SERVICES
PURCHASING DIVISION



QWEST/LCI
1009 TWILIGHT TRAIL #123
FRANKFORT KY 40601-

NUMBER : 4020014
BUYER : BRAD NEW
BUYER PHONE : (615)741-2714
SWC NUMBER : A3806
DATE ISSUED : 09/07/99
VENDOR NUMBER : 391455803-00
VENDOR PHONE : (502)226-4737
FEIN/SSN : 391455803
REQ AGENCY : 317022
DEPT OF FINANCE & ADMINISTRATION
AGENCY REQ NO. :
TOPS REQ NO. : 1037154
FISCAL YEAR : 99
EFFECTIVE DATE : 09/01/98
EXPIRATION DATE : 08/31/00
DELIVERY CONTACT : DREW JORDAN
DELIVERY PHONE : 615-741-5186-0000

CALLING CARD SERVICES

1. ORDERING PERIOD: CONTRACT BEGIN ORDERING PERIOD DATE IS: 09/01/98
CONTRACT END ORDERING PERIOD DATE IS: 08/31/00
2. F.O.B. POINT: DESTINATION
3. DELIVERY: DELIVERY WILL BE MADE WITHIN: 090 DAYS ARO
UNLESS SPECIFIED DIFFERENTLY ON EACH LINE OR UNLESS
AN ALTERNATE DELIVERY SCHEDULE IS INDICATED. AN
ALTERNATE DELIVERY SCHEDULE IS ENCLOSED HEREIN: NO
4. PROMPT PAYMENT TERMS: PROMPT PAYMENT TERMS ARE: N/A
5. BID REFERENCE NO.: YOUR BID REFERENCE NUMBER IS: N/A
6. AWARDED LINES: YOU WERE AWARDED 00017 LINES FROM THE SOLICITATION NUMBER 2036398.
THESE LINES ARE INCLUDED AS A PART OF THIS CONTRACT.
7. THE TOTAL PURCHASES OF ANY INDIVIDUAL ITEM ON THE CONTRACT IS NOT KNOWN. THE PURCHASING DIVISION HAS
ATTEMPTED TO GIVE AN ACCURATE ESTIMATE OF PROBABLE PURCHASES OF EACH ITEM FROM THE CURRENT CONTRACT PERIOD
AND PROJECTED ESTIMATES FOR THE NEW CONTRACT PERIOD. THE PURCHASING DIVISION DOES NOT GUARANTEE THAT THE
STATE WILL BUY ANY OR ALL ESTIMATED AMOUNTS OF ANY SPECIFIED ITEM OR ANY TOTAL AMOUNT.

ALL TERMS AND CONDITIONS AS A PART OF SOLICITATION 2036398 INCLUDING ANY AMENDMENTS
THERETO AND ALSO INCLUDING THE BIDDER'S PROPOSAL AS ACCEPTED BY THE STATE ARE
INCLUDED HEREIN BY REFERENCE AND MADE PART HEREOF EXCEPT AS SPECIFIED HEREIN.

APPROVED: _____

DIRECTOR OF PURCHASING

BY: _____

*** ORIGINAL SIGNED ***

DATE _____

EXTRA COPY 1

FORM XXXXX

TERMS AND CONDITIONS		AGENCY CONTRACT (M/Y)	
BIDDER : QWEST/LCI		NUMBER : 4020014 SWC NUMBER : A3806	PAGE 2

F.O.B. POINT (AGENCY CONTRACT)

F.O.B. POINT FOR SHIPMENT TO

AGENCY NAME DEPARTMENT OF FINANCE AND ADMINISTRATION
ADDRESS COMMUNICATIONS MANAGEMENT
598 JAMES ROBERTSON PARKWAY, 3RD FLOOR
NASHVILLE, TN 37243

FREIGHT F.O.B. STATE AGENCY (IN-HOUSE)

ALL QUOTATIONS SHALL BE F.O.B. DESTINATION DEPARTMENT OF FINANCE AND ADMINISTRATION. THE TERM F.O.B. DESTINATION SHALL MEAN DELIVERED AND UNLOADED IN-HOUSE OR ON-SITE SERVICE, WITH ALL CHARGES FOR TRANSPORTATION AND UNLOADING PREPAID BY THE VENDOR/CONTRACTOR.

TERM

THE ANTICIPATED EFFECTIVE AND EXPIRATION DATES ARE SHOWN ON THE FACE OF THE SOLICITATION WITH 2 OPTIONS TO EXTEND FOR A PERIOD OF 12 MONTHS EACH BY THE STATE. IT IS UNDERSTOOD AND AGREED THAT THE STATE RESERVES THE RIGHT TO EXTEND THE CONTRACT PERIOD OF TERM CONTRACTS RESULTING FROM THIS SOLICITATION 180 DAYS BEYOND THE NORMAL EXPIRATION DATE OF SUCH CONTRACT. THE MAXIMUM TERM OF A CONTRACT CAN NOT EXCEED A TOTAL OF 60 MONTHS.

DELIVERY TIME (DAYS)

ALL ITEMS MUST BE DELIVERED WITHIN APPROXIMATELY THIRTY (30) DAYS AFTER RECEIPT OF A PURCHASE ORDER.

FIRM BID PRICE PERIOD

PRICES QUOTED SHALL BE FIRM FOR THREE (3) YEARS FOLLOWING THE DATE OF THE AWARD, EXCEPT THE STATE SHALL BE ADVISED OF, AND RECEIVE THE BENEFIT OF, ANY PRICE DECREASE IN EXCESS OF FIVE (5) PERCENT AUTOMATICALLY. THE VENDOR/CONTRACTOR MUST PROVIDE WRITTEN PRICE REDUCTION INFORMATION WITHIN TEN (10) DAYS OF ITS EFFECTIVE DATE.

CANCELLATION

THIS CONTRACT MAY BE CANCELLED BY THE STATE IMMEDIATELY UPON WRITTEN NOTICE OF INTENT TO CANCEL, AND AT THE END OF ANY FISCAL YEAR WITHOUT NOTICE, IN THE EVENT THAT FUNDS TO SUPPORT THE CONTRACT BECOME UNAVAILABLE. IN ADDITION, THE STATE MAY CANCEL ANY TERM CONTRACT FOR CAUSE EFFECTIVE IMMEDIATELY UPON WRITTEN NOTICE OF INTENT TO CANCEL. THE VENDOR/CONTRACTOR WILL BE REQUIRED TO HONOR ALL PURCHASE ORDERS THAT WERE PREPARED AND DATED PRIOR TO THE DATE OF EXPIRATION OR CANCELLATION, IF RECEIVED BY THE VENDOR/CONTRACTOR WITHIN A PERIOD OF 30 DAYS FOLLOWING THE DATE OF EXPIRATION OR CANCELLATION. CANCELLATION BY THE STATE DOES NOT RELIEVE THE VENDOR/CONTRACTOR OF ANY LIABILITY ARISING OUT OF THE DEFAULT OR NONPERFORMANCE.

1.0 TECHNICAL DESCRIPTION

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1.0 TECHNICAL DESCRIPTION

1.0.1 ANY VENDOR RESPONDING TO THIS ITB IS CONSIDERED TO BE A BIDDER. THE TERM "CONTRACTOR" AS EMPLOYED IN THIS ITB INDICATES THE SUCCESSFUL BIDDER TO WHOM A CONTRACT HAS BEEN AWARDED.

1.0.2 FOR THE BID TO BE CONSIDERED RESPONSIVE, A BIDDER MUST ACCEPT AND COMPLY WITH EVERY NUMBERED REQUIREMENT IN THIS BID SPECIFICATION.

1.0.3 IN ADDITION, A BIDDER MAY ELABORATE THE RESPONSE. THE BIDDER SHALL CLEARLY NUMBER ALL LONG FORM RESPONSES AND ASSEMBLE THEM IN ORDER WITH THE BID.

1.1 SCOPE OF SERVICE

1.1.1 THE STATE WILL ISSUE TELEPHONE CALLING CREDIT CARDS TO EMPLOYEES WHO TRAVEL ON STATE BUSINESS AND OR MAKE STATE BUSINESS CALLS FROM THEIR RESIDENCE. THE BIDDER SHALL SUBMIT A BID FOR FURNISHING, INSTALLING, OPERATING, AND MAINTAINING CALLING CREDIT CARD SERVICES FOR AGENCIES OF TENNESSEE STATE GOVERNMENT. THESE CALLING CARDS WILL PERMIT AUTHORIZED CALLS TO ORIGINATE ON THE PUBLIC SWITCHED TELEPHONE NETWORK. THE COST OF SUCH CALLS WILL BE CHARGED TO PRE-SELECTED STATE ACCOUNTS. THE STATE IS PRESENTLY USING APPROXIMATELY 8,000 CARDS ISSUED BY SPRINT.

1.1.2 THE CONTRACTOR SHALL INSURE PROPER CALL COMPLETION AND COMPILE TRAFFIC STATISTICS, MAINTENANCE INFORMATION, AND OPERATION REPORTS AS REQUIRED BY THE STATE. THE CONTRACTOR WILL PROVIDE TAPES OF ALL CALL ACTIVITY AND BILLING INFORMATION AT NO COST TO THE STATE.

1.1.3 THE CONTRACTOR SHALL ALLOW THE STATE TO ADJUST THE QUANTITY OF CALLING CARDS SERVING ANY LOCATION WITHIN TENNESSEE DURING THE TERM OF THE CONTRACT WITHOUT ADJUSTING THE PER MINUTE SERVICE PRICING PARAMETERS.

1.2 COVERAGE

PRESENTLY 95 PERCENT OF THE DIALED CALLS ARE PLACED FROM WITHIN THE STATE OF TENNESSEE AND WHILE APPROXIMATELY EIGHTY FIVE PERCENT OF COMPLETED CALL ARE PLACED TO TELEPHONE NUMBERS TO STATE OF TENNESSEE GOVERNMENT NUMBERS. THE CONTRACTOR'S SUPPORT SERVICES WILL THEREFORE FOCUS ON INTRASTATE COVERAGE WITHIN THE STATE OF TENNESSEE.

2.0 CALLING CARD SERVICE

2.1 CARD DESIGN

2.1.1 THE CONTRACTOR WILL PROVIDE THE STATE WITH CUSTOM CALLING CARDS AS DESIGNED BY THE STATE AT NO ADDITIONAL CHARGE.

2.1.2 THE CARD MUST BE IMPRINTED WITH LOCAL AND LONG DISTANCE DIALING INSTRUCTIONS.

2.1.3 THE CARD MUST BE IMPRINTED WITH A UNIQUE 10-DIGIT CALLING CARD

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2.1.3 THE CARD MUST BE IMPRINTED WITH A UNIQUE 10-DIGIT CALLING CARD NUMBER.

2.2 AUTHORIZATION CODES

2.2.1 THE CONTRACTOR WILL PROVIDE AN AUTHORIZATION CODE THAT WILL CONTAIN A 10 DIGIT NUMBER AND A 4 DIGIT PIN NUMBER FOR A TOTAL OF 14 DIGITS FOR EACH STATE CALLING CARD THAT IS ISSUED. THE AUTHORIZATION CODE SHALL NOT BE A TELEPHONE NUMBER NOR INCLUDE ACTUAL TELEPHONE NUMBERS ISSUED WITHIN THE STATE.

2.2.2 THE STATE WILL ALSO USE THE AUTHORIZATION CODE AS A BILLING FIELD.

2.3 CARD ASSIGNMENT

THE CONTRACTOR WILL PROVIDE AN INITIAL 8,500 CALLING CARDS TO THE STATE. THE STATE AT A MINIMUM WILL ACTIVATE AND DEACTIVATE CARDS AS REQUIRED THROUGH THE VENDOR VIA VERBAL AUTHORIZATION FOLLOWED BY WRITTEN CONFORMATION.

3.0 CALLING CARD FEATURES

3.1 CONSECUTIVE CALLING

STATE CALLING CARD USERS CAN PLACE AN UNLIMITED NUMBER OF SEQUENTIAL CALLS WITHOUT REENTERING AUTHORIZATION CODES BY DEPRESSING A SPECIFIED KEY ON THE TOUCH PAD AT THE CONCLUSION OF EACH CALL.

3.2 CONFERENCE CALLING

STATE CALLING CARD USERS MAY CONNECT UP TO THREE TOTAL PARTIES (IF LINE HAS CONFERENCE CAPABILITIES) WITHOUT OPERATOR ASSISTANCE TO CONVENE A CONFERENCE CALL. APPROPRIATE CHARGES WILL BE BILLED TO THE ORIGINATING CALLING CARD.

3.3 MISDIAL CORRECTIONS

PROCEDURES SHOULD BE ESTABLISHED TO RECEIVE REFUNDS ON MIS-DIALED CALLS.

3.4 ROTARY ACCESS

THE CALLING CARD CAN BE USED FROM ANY TOUCH-TONE OR ROTARY TELEPHONE WITHOUT INCURRING ANY ADDITIONAL CHARGES.

3.5 OPERATOR ASSISTANCE

THE CONTRACTOR WILL PROVIDE A CALLING CARD OPERATOR TO ASSIST USERS WITH CALL COMPLETION (INCLUDING ROTARY DIALED CALLS). CALLING CARDS

USERS ENCOUNTERING TROUBLE SHOULD NOT BE CHARGED FOR OPERATOR ASSISTED CALLS.

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4.0 VENDOR SERVICE FEATURES

4.1 CLASS OF SERVICE

THE CONTRACTOR MUST PROVIDE CLASS OF SERVICE CAPABILITIES WITH WELL DEFINED CALLING AREAS. THE MINIMUM REQUIREMENTS FOR CLASSES OF SERVICE ARE:

INTERNATIONAL CALLING (BILLED AT TARIFF RATE)
NATIONWIDE CALLING (US 50 STATES)
STATE OF TENNESSEE CALLING

4.2 PERSONAL IDENTIFICATION NUMBERS (PIN)

THE CONTRACTOR SHALL PROVIDE A COMPUTER ASSIGNED RANDOM PIN FOR EACH CALLING CARD. AS A PRECAUTION AGAINST FRAUD IN THE EVENT OF A LOST OR STOLEN CARD, THE PIN SHALL NOT BE PRINTED ON THE CALLING CARD.

4.3 FRAUD PROTECTIONS

4.3.1 THE CONTRACTOR SHALL PROVIDE CAPABILITIES FOR DETECTING AND REPORTING SUSPECTED FRAUD AND ABUSE IN THE USE OF CALLING CARDS AND FOR THE IDENTIFICATION AND PROSECUTION OF PERPETRATORS. NOTIFICATION SHOULD BE MADE TO THE STATE OF TENNESSEE CALLING CARD ADMINISTRATOR.

4.3.2 THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR FRAUDULENT USE OF CALLING CARDS BY UNAUTHORIZED USERS, AFTER THE STATE REPORTS A LOST OR STOLEN CARD.

4.3.3 ANY NEW CARDS ISSUED MUST BE AUTHORIZED BY THE STATE OF TENNESSEE CALLING CARD ADMINISTRATOR.

5.0 VENDOR RESPONSIBILITIES

5.1 IMPLEMENTATION (PRIOR TO EFFECTIVE DATE OF CONTRACT)

THE CONTRACTOR WILL HAVE COMPLETED PRELIMINARY TESTING OF CALLING CARD SERVICE AND WILL BE READY FOR STATE TESTING WITHIN 90 CALENDAR DAYS AFTER AWARD OF CONTRACT. THE IMPLEMENTATION AND TESTING OF THE CONTRACTOR'S CALLING CARD SERVICE SHALL NOT DISRUPT SERVICES BEING PROVIDED IN CONNECTION WITH THE STATE'S CURRENT CALLING CARDS.

5.2 COORDINATION

5.2.1 THE CONTRACTOR IS RESPONSIBLE FOR MONITORING ALL INSTALLATION ACTIVITY, PREPARING DETAILED TEST SCHEDULES, CONDUCTING NETWORK TESTING, PREPARING DETAILED CUTOVER AND TEST PROCEDURES, AND ULTIMATELY CUTTING OVER THE PROPOSED SERVICES.

5.2.2 THE CONTRACTOR WILL APPOINT A SINGLE PROJECT MANAGER TO OVERSEE THE TOTAL INSTALLATION OF THE REQUIRED SERVICE. THE ASSIGNED PROJECT MANAGER MAY NOT BE CHANGED WITHOUT PRIOR WRITTEN NOTIFICATION TO THE OFFICE OF INFORMATION RESOURCES (OIR). WITHIN TWO WEEKS AFTER

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TO THE OFFICE OF INFORMATION RESOURCES (OIR). WITHIN TWO WEEKS AFTER THE AWARD OF THE CONTRACT, THE PROJECT MANGER SHALL FORMULATE AND PROVIDE TO OIR AN IMPLEMENTATION MILESTONE CHART. THE CONTRACTOR SHALL PROVIDE WEEKLY WRITTEN UPDATES ON PROJECT STATUS THEREAFTER.

5.2.3 AFTER THE INITIAL INSTALLATION, THE CONTRACTOR SHALL DESIGNATE ONE INDIVIDUAL AS A CUSTOMER SERVICE REPRESENTATIVE FOR THE STATE'S ACCOUNT FOR THE TERM OF THE CONTRACT FOR BOTH BILLING AND SERVICE MATTERS. THE CONTRACTOR SHALL OBTAIN THE STATE'S WRITTEN APPROVAL BEFORE CHANGING THIS INDIVIDUAL. THE CONTRACTOR WILL PROVIDE ADDITIONAL BACK-UP CUSTOMER SERVICE PERSONNEL ON A 24 HOUR, 7 DAY BASIS, INCLUDING A TOLL-FREE NUMBER FOR CUSTOMER HELP.

5.2.4 THE CONTRACTOR WILL COORDINATE THE INSTALLATION AND TESTING OF THE PROPOSED SERVICES WITH ALL APPROPRIATE LOCAL EXCHANGE CARRIERS (LECS) AND WILL COORDINATE ALL CALLING CARD RELATED LEC ACTIVITIES.

5.3 ACCEPTANCE

THE CONTRACTOR SHALL HAVE A PERIOD OF 30 CONSECUTIVE CALENDAR DAYS AFTER CUT-OVER TO DEMONSTRATE HIS COMPLIANCE WITH ALL SERVICE REQUIREMENTS FOR THIS SPECIFICATION. UPON SATISFACTORY COMPLETION OF THIS ACCEPTANCE PERIOD, THE STATE SHALL ISSUE A WRITTEN NOTIFICATION OF SERVICE ACCEPTANCE. IN THE EVENT THAT THE SERVICES DO NOT MEET ALL STATE REQUIREMENTS DURING THE INITIAL 30 CALENDAR DAYS, THE PERFORMANCE PERIOD SHALL CONTINUE ON A DAY-TO-DAY- BASIS UNTIL ALL REQUIREMENTS HAVE BEEN MET FOR 30 CONSECUTIVE CALENDAR DAYS.

5.4 TROUBLE RESPONSE

5.4.1 THE CONTRACTOR MUST PROVIDE A CENTRALIZED CALLING CARD TROUBLE REPORTING POSITION THAT IS STAFFED 24 HOURS PER DAY, 7 DAYS A WEEK.

5.4.2. THE CONTRACTOR MUST RESPOND TO TROUBLE REPORTS WITHIN ONE HOUR OF NOTIFICATION BY TELEPHONE OR FACSIMILE. THE CONTRACTOR SHALL FURNISH A VERBAL OR FACSIMILE REPORT WITHIN ONE HOUR OF TROUBLE CLEARANCE. THE CONTRACTOR SHALL PROVIDE A COPY OF EACH WRITTEN TROUBLE TICKET TO THE STATE WITHIN THREE WORKING DAYS AFTER TROUBLE NOTIFICATION, LISTING THE TIME AND DATE OF NOTIFICATION AND THE RESPONSE. THE TROUBLE RESPONSE MUST SHOW THE DATE AND TIME OF RESTORATION OF SERVICE AND THE DESCRIPTION OF THE TROUBLE FOUND. REQUIRED REPORTS SHALL BE SUBMITTED TO STATE OF TENNESSEE CALLING CARD ADMINISTRATOR IN NASHVILLE.

5.4.3. THE BIDDER WILL PROVIDE AN ESCALATION PROCEDURE AND CONTACT LIST TO BE INVOKED FOR UNRESOLVED TROUBLES. THIS SHALL INCLUDE NAMES, TITLES, AND TELEPHONE NUMBERS OF ALL CONTACT PERSONS IN THE ESCALATION CHAIN. THE CONTRACTOR SHALL PROMPTLY NOTIFY THE STATE OF ANY CHANGES IN THIS ESCALATION CHAIN. PROBLEMS THAT ARE NOT RESOLVED WITHIN TWO HOURS OF THE TIME THAT BONA FIDE ATTEMPT WAS MADE TO PROVIDE NOTIFICATION OF TROUBLE SHALL CONSTITUTE A PROLONGED OUTAGE AND SHALL AUTOMATICALLY ESCALATE TO THE NEXT STEP IN THE ESCALATION CHAIN.

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5.4.4 IN ADDITION TO PROVIDING THE LOCAL TRANSMISSION SERVICES, LEC'S ALSO PROVIDE CENTRAL OFFICE SERVICES. THE CONTRACTOR WILL COORDINATE DIRECTLY WITH EACH LEC AS APPROPRIATE TO ISOLATE AND RESOLVE ANY FAULTS OR CONNECTION PROBLEMS.

5.5 REMEDIES

5.5.1. IF THE REQUIRED SERVICES ARE NOT READY FOR USE WITHIN 30 CALENDAR DAYS OF THE ORIGINAL SERVICE COMMENCEMENT DATE, THE STATE RESERVES THE RIGHT TO CANCEL THE CONTRACT WITHOUT FURTHER OBLIGATION. IN THE EVENT OF SUCH CANCELLATION, THE CONTRACTOR SHALL BE LIABLE FOR PENALTIES AS FOLLOWS:

(1) IF NO PORTION OF THE INITIALLY ORDERED SERVICE IS READY FOR USE ON THE REQUIRED INSTALLATION DATE, THEN DAILY PENALTIES DAMAGES SHALL BE ONE PERCENT OF THE TOTAL SERVICE ORDER PER CALENDAR DAY, FOR A PERIOD NOT TO EXCEED 90 CALENDAR DAYS.

(2) IF SOME, BUT NOT ALL OF THE INITIALLY ORDERED SERVICE IS READY FOR USE ON THE REQUIRED INSTALLATION DATE, AND THE STATE USES SUCH SERVICES, THEN DAILY PENALTIES SHALL NOT ACCRUE AGAINST THOSE SERVICES FOR ANY CALENDAR DAY ON WHICH THEY ARE USED.

5.5.2 IF THE CONTRACTOR FAILS TO GAIN SERVICE ACCEPTANCE WITHIN 90 CALENDAR DAYS FROM CUT-OVER, THE STATE MAY TERMINATE THE CONTRACT. IF, AFTER ACCEPTANCE, EXCEPT IN CASES OF FORCE MAJEURE, THE CONTRACTOR FAILS TO MEET THE TECHNICAL PERFORMANCE REQUIREMENT OF THIS CONTRACT, THE CONTRACT MAY BE CANCELED AT THE STATE'S EXCLUSIVE OPTION. THE STATE MAY ALSO WITHHOLD PAYMENTS IN EXCESS OF FAIR COMPENSATION FOR WORK COMPLETED OR SERVICES ACTUALLY RENDERED. THE STATE SHALL HAVE NO TERMINATION LIABILITY.

5.5.3. IF AT ANY TIME THE CONTRACTOR IS UNABLE TO SUBMIT ACCURATE CALL DETAIL INFORMATION IN THE REQUIRED FORMAT, THE STATE MAY, AT ITS SOLE OPTION, REFUSE TO PAY THE CONTRACTOR FOR ANY AND ALL CALLS NOT SUPPORTED BY THE CALL DETAIL REPORT, OR MAY DELAY PAYMENT WITHOUT PENALTY UNTIL THE CALL DETAIL REPORT IS ACCEPTED.

5.5.4. ANY FAILURE ON THE PART OF THE CONTRACTOR TO COMPLY WITH APPLICABLE STATE OR FEDERAL REGULATIONS SHALL BE GROUNDS FOR CONTRACT TERMINATION.

5.6 REPORTS

5.6.1. THE CONTRACTOR WILL FURNISH AT NO ADDITIONAL COST TO THE STATE, WITHIN TEN WORKING DAYS OF THE BILL CUTOFF EACH MONTH, A CALL DETAIL RECORD (CDR) MAGNETIC TAPE IN THE STATE SPECIFIED FORMAT LISTING ALL COMPLETED CALLS. AN ADDITIONAL CD ROM DISK SHALL BE FURNISHED EACH MONTH THAT SHALL INCLUDE TRAFFIC STATISTICS THAT DEFINE ACTIVITY BY HOUR, INCLUDING PEG COUNT, ERLANGS OR CCS, AND OUT OF SERVICE INDICATIONS. ALL CALLS LISTED SHALL INCLUDE THE DATE, TIME, ORIGINATING CITY, CALLING NUMBER IDENTIFICATION, TERMINATING CITY, CALLED NUMBER, CALL DURATION AND CONTRACT CHARGE. BOTH

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CITY, CALLED NUMBER, CALL DURATION AND CONTRACT CHARGE. BOTH ORIGINATING AND TERMINATING CITIES SHALL BE CORRECTLY IDENTIFIED BY NPA+NXX PER THE AT&T DISTANCE DIALING CALLING GUIDE.

5.7 AGENCY BILLING RECORDS

THE CONTRACTOR MUST DELIVER EACH AT NO ADDITIONAL COST TO THE STATE, A BILLING TAPE THAT MEETS THE REQUIREMENTS SHOWN IN EXHIBIT 5-1. AFTER NOTIFICATION OF INTENT TO AWARD A CONTRACT, THE STATE WILL FURNISH THE CONTRACTOR WITH MAGNETIC TAPE BILLING PLAN SPECIFICATIONS. THE CONTRACTOR WILL SUBMIT A TEST SAMPLE TAPE TO THE STATE PRIOR TO RECEIVING THE SERVICE CONTRACT.

5.8 BILLING

5.8.1 THE CONTRACTOR MUST FURNISH BILLING FOR ALL CALLING CARD SERVICES ON A CURRENT MONTHLY BASIS. EACH INVOICE MUST COVER ONE CALENDAR MONTH AND MUST BE PROVIDED TO THE STATE WITHIN 10 DAYS AFTER THE CLOSE OF THE BILLING CYCLE. BILLING SHALL BE PROVIDED BY PAPER HARD COPY AND BY MAGNETIC TAPE. BILLING WILL BE BY INDIVIDUAL CARD NUMBER AND ACCOUNT NUMBER.

EXHIBIT 5-1. MAGNETIC BILLING TAPE SPECIFICATION
TAPE PHYSICAL CHARACTERISTICS

TRACKS	9			
DENSITY	6250			
PARITY	ODD			
PHASE	ENCODED			
CHARACTER	EBCDIC			
FILE QUALITY	1 PER BILLING REVENUE ACCOUNTING OFFICE			
RECORD LENGTH	450 CHARACTER, FIXED LENGTH			
BLOCK SIZE	22,500 CHARACTER, FIXED LENGTH			
BLOCKING FACTOR	50 RECORD/BLOCK			
RECORD NAME	CAP			
RECORD LENGTH	150			
FIELD NAME	PIC	ATTR	SIZE	POS
RECORD NO.	9(2)	9DR	2	6-7 (VALUE = 60)
SUB RECORD NO.	9(2)	9DR	2	8-9 (VALUE = 00)
EARNING ACCOUNT NO	X(13)	XDL	13	44-56
BILL PAGE NUMBER	9(6)	9DR	6	64-69
CUSTOMER ID	X(25)	XDL	25	99-123
RECORD NAME	ITEMIZED CALL DETAIL			
RECORD NUMBER	60			
RECORD LENGTH	450			
FIELD NAME	PIC	ATTR	SIZE	POS
BILL PAGE MINUTES	X(1)	XDL	4	151-154
BILL PAGE TENTHS	X(1)	XDL	1	155
ADDITIONAL DISCOUNT	X(1)	XDL	1	184
DATE OF RECORD	9(6)	9DR	6	237-242 (YYMMDD)
FROM NUMBER	X(10)	XDL	10	245-254
TO NUMBER	X(10)	XDL	10	260-269
CHARGE - \$	S9(4)V99	SDR	6	270-275
STATE TAX	S99V99	SDR	4	278-281

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STATE TAX	S99V99	SDR	4	278-281
LINE SURCHARGE	S9(3)V99	SDR	5	278-282
CONNECT TIME	X(6)	XDL	6	285-290
HOUR			(2)	285-286
MINUTES			(2)	287-288
SECONDS			(2)	289-290
BILLING/REPORTED TIME	X(7)	XDL	7	291-297
MINUTES			(4)	291-294
SECONDS			(2)	295-296
1/10 SECONDS			(1)	297
RATE CLASS	X(1)	XDL	1	309
MESSAGE	X(1)	XDL	1	310
IND 13 TAX OTHER LINE CHG	9(1)	9DR	1	324
NORTH AMERICA FROM PLACE	X(10)	XDL	10	353-362
NORTH AMERICA FROM STATE	X(2)	XDL	2	363-364
NORTH AMERICA TO PLACE	X(10)	XDL	10	353-362
NORTH AMERICA FROM STATE	X(2)	XDL	2	363-364
SETTLEMENT CODE	X(1)	XDL	1	379

5.8.2 BILLING FOR EACH CALL WILL COMMENCE NO EARLIER THAN ANSWER SUPERVISION.

5.8.3 ALL REQUESTS FOR CREDITS MADE 10 DAYS OR MORE BEFORE THE CLOSE OF A BILLING CYCLE MUST BE REFLECTED ON THE NEXT INVOICE. IF THE CONTRACTOR DOES NOT INCLUDE THE CREDITS REQUESTED AND DUE ON THE INVOICE, THE STATE WILL DEDUCT A LIKE AMOUNT FROM FUTURE BILLS.

5.8.4 CALLING CARDS BEING DISCONTINUED SHALL BE PROCESSED WITHIN A MAXIMUM OF ONE HOUR OF THE STATE'S NOTICE TO DISCONNECT. CHARGES FOR DISCONTINUED CARDS SHALL TERMINATE WITHIN 15 MINUTES OF NOTIFICATION TO DISCONNECT.

5.9 REQUIRED TECHNICAL DOCUMENTATION

5.9.1 DESCRIBE IN DETAIL YOUR ORGANIZATION, YOUR PERSONNEL, YOUR CUSTOMER SERVICE STAFF, AND YOUR SUPPORT SERVICES WITHIN THE STATE OF TENNESSEE.

6.0 CALL CARD MANAGEMENT INFORMATION SYSTEM

6.1 HARDWARE

THE STATE WILL PROVIDE AN IBM COMPATIBLE PERSONAL COMPUTER WITH DOS OPERATING SYSTEM, AN 80486 60 MHZ CPU, A 600 MEGABYTE HARD DRIVE, AND 16 MEGABYTE RAM.

6.2 SOFTWARE

THE CONTRACTOR WILL SUPPLY AND SUPPORT AT NO ADDITIONAL COST TO THE STATE A SOFTWARE PACKAGE THAT WILL BE INSTALLED AT THE OIR TELECOMMUNICATION IN THE STATE'S PC AS INDICATED ABOVE. THIS PROGRAM WILL ALLOW THE STATE CALLING CARD ADMINISTRATOR TO ACCESS AND PRINT MANAGEMENT REPORT FROM THE CD ROM SUPPLIED IN 5.6.1.

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6.3 SUPPORT SERVICES

THE CONTRACTOR WILL TRAIN 2 STATE EMPLOYEES IN THE CALLING CARD APPLICATION AND SUPPORT THEM VIA TELEPHONE THROUGHOUT THE TERM OF THE CONTRACT AT NO ADDITIONAL COST TO THE STATE. AS A MINIMUM THESE STATE EMPLOYEES WILL BE TRAINED ON CALLING CARD CAPABILITIES AND LIMITATIONS IN ADDITION TO TROUBLE REPORTING AND MANAGEMENT REPORTS AVAILABLE.

6.4 MANAGEMENT REPORTS

THE CONTRACTOR SHALL PROVIDE THE ABILITY TO FORMAT AND PRINT: STANDARD DETAIL REPORTS, STANDARD SUMMARY REPORTS, STANDARD EXCEPTION REPORTS, CUSTOMIZED DETAIL REPORTS, CUSTOMIZED SUMMARY REPORTS AND CUSTOMIZED EXCEPTION REPORTS. GRAPHICAL AND TABULAR FORMS SHALL BE INCLUDED WHERE REQUIRED.

7.0 GENERAL INFORMATION AND BIDDING GUIDELINES

7.1 PRICING GUIDELINES

7.1.1 CALLING CARD BILLING INDICATES THAT THE STATE IS PROCESSING APPROXIMATELY 37,000 CALLS PER MONTH. APPROXIMATELY 75 PERCENT OF THE CALLS ARE COMPLETED DURING THE PEAK HOURS, DEFINED AS BETWEEN 8:00 A. M. AND 5:00 P. M. LOCAL TIME, MONDAY THROUGH FRIDAY (EXCLUDING HOLIDAYS).

7.1.2 THE PRESENT CALLING CARD SERVICE INVOLVES A SINGLE CONTRACT, WITH ONE CALLING CARD INVOICE. THE STATE'S GOAL IS TO OBTAIN ALL CALLING CARD SERVICES FROM CONTRACTORS/CONTRACTOR UNDER A SINGLE SERVICE CONTRACT THAT MAXIMIZES THE STATE'S DISCOUNTS. THIS WILL RESULT IN ONE SUMMARY INVOICE THAT INCLUDES THE COST OF ALL CALLING CARD SERVICES THROUGHOUT TENNESSEE, AND ONE MAGNETIC BILLING TAPE IN THE STATE'S FORMAT, THAT INCLUDES THE CALL DETAIL FOR EACH AGENCY CALLING CARD. THE STATE IS AWARE THAT IN THE EVENT A USER DOES NOT FOLLOW THE PROPER DIALING INSTRUCTIONS TO REACH THE CALLING CARD SERVICE THAT THE CALL WILL BE SUBJECT TO NORMAL TARIFF CHARGES.

7.2. BID PRICING INSTRUCTIONS

7.2.1 THE BIDDER SHALL INCLUDE ALL UNIT PRICES AND AMOUNTS REQUESTED ON THE PRICE SHEET.

7.2.2 THE BIDDER WILL INSERT THE APPROPRIATE "RATE PER MINUTE" AND "SURCHARGE PER CALL" (IF REQUIRED) AS UNIT PRICES AND WILL COMPLETE THE MULTIPLICATION AND INDICATE THE RESULTS IN THE AMOUNT COLUMN.

7.2.3 THE UNIT PRICES SUBMITTED BY THE BIDDER SHALL BE INCORPORATED INTO THE CONTRACT WITH THE SUCCESSFUL BIDDER.

7.2.4 THE STATE WILL NOT BE RESPONSIBLE FOR IMPLEMENTATION COSTS. THE BIDDER MUST STATE ON THE PRICE SHEET THE FIXED PRICES FOR PROVIDING THE SERVICES REQUESTED IN THE TECHNICAL SPECIFICATION.

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PROVIDING THE SERVICES REQUESTED IN THE TECHNICAL SPECIFICATION.

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LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
	UNLESS SPECIFIED ELSEWHERE, SHIP TO: DEPT OF FINANCE & ADMINISTRATION OIR/TELECOMMUNICATIONS 598 JAMES ROBERTSON PKWY 3RD FLOOR NASHVILLE TN 37243-0560			
00001	COMMODITY CODE: 938-39-032730 TELEPHONE CALLING CARD SERVICE -- CHARGE PER MINUTE, PEAK: INTRAST/INTERLATA AS PER ATTACHED SPECIFICATIONS	MIN	\$.12500	N/A
00002	COMMODITY CODE: 938-39-032396 CHARGE/MIN, PEAK, INTRAST/INTRALATA TELEPHONE CALLING CARD SERVICE AS PER ATTACHED SPECIFICATIONS	MIN	\$.12500	N/A
00003	COMMODITY CODE: 938-39-032731 SURCHARGE/CALL PEAK, INTRAST/INTERLATA TELEPHONE CALLING CARD SERVICE AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A
00004	COMMODITY CODE: 938-39-032397 SURCHARGE/CALL PEAK, INTRAST/INTRALATA TELEPHONE CALLING CARD SERVICE AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A
00005	COMMODITY CODE: 938-39-032732 CHARGE/MINUTE, PEAK, INTERSTATE TELEPHONE CALLING CARD SERVICE AS PER ATTACHED SPECIFICATIONS	MIN	\$.12500	N/A
00006	COMMODITY CODE: 938-39-032733 SURCHARGE/CALL PEAK, INTERSTATE TELEPHONE CALLING CARD SERVICE AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A
00007	COMMODITY CODE: 938-39-032734 CHARGE/MIN OFF PEAK, INTRAST/INTERLATA TELEPHONE CALLING CARD SERVICE AS PER ATTACHED SPECIFICATIONS	MIN	\$.13110	N/A
00008	COMMODITY CODE: 938-39-032398 CHARGE/MIN OFF PEAK, INTRAST/INTRALATA TELEPHONE CALLING CARD SERVICE AS PER ATTACHED SPECIFICATIONS	MIN	\$.13110	N/A
00009	COMMODITY CODE: 938-39-032735 SURCHARGE/CALL OFF PEAK INTRAST/INTERLATA TELEPHONE CALLING CARD SERVICE AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A
00010	COMMODITY CODE: 938-39-032399 SURCHARGE/CALL OFF PEAK, INTRAST/INTRALATA TELEPHONE CALLING CARD SERVICE AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A

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LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
00011	COMMODITY CODE: 938-39-032736 CHARGE/MIN OFF PEAK, INTERSTATE TELEPHONE CALLING CARD SERVICE AS PER ATTACHED SPECIFICATIONS	MIN	\$.13110	N/A
00012	COMMODITY CODE: 938-39-032737 SURCHARGE/CALL OFF PEAK, INTERSTATE TELEPHONE CALLING CARD SERVICE AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A
00013	COMMODITY CODE: 938-39-032738 CHARGE/CALL LOCAL CALL TRAFFIC TELEPHONE CALLING CARD SERVICE VIA RADIO OR WIRE:NOT ANSWERING SERVICE AS PER ATTACHED SPECIFICATIONS	EA	\$.13110	N/A
00014	COMMODITY CODE: 938-39-040850 SUR CHARGE ON DIRECTORY ASSISTANCE	MIN	\$.00000	N/A
00015	COMMODITY CODE: 938-39-040851 SUR CHARGE ON OPERATOR SERVICES FOR CALLING CARD SERVICE	EA	\$.30000	N/A
00016	COMMODITY CODE: 938-39-040852 OPERATOR SERVICE FOR CALLING CARD	MIN	\$.30000	N/A
00017	COMMODITY CODE: 938-39-040853 UNIVERSAL SERVICE FEE CALLING CARD SERVICE	PCT	N/A	+4.90

STATEWIDE CONTRACT (MY)
AWARD

STATE OF TENNESSEE

DEPARTMENT OF GENERAL SERVICES

PURCHASING DIVISION



QWEST/LCI
1009 TWILIGHT TRAIL #123
FRANKFORT KY 40601-

NUMBER : 4021777
BUYER : LORRAINE EDWARDS
BUYER PHONE : (615)741-2714
SWC NUMBER : 3048
DATE ISSUED : 07/01/99
VENDOR NUMBER : 391455803-00
VENDOR PHONE : (502)226-4737
FEIN/SSN : 391455803
REQ AGENCY : 32110
DEPARTMENT OF GENERAL SERVICE
AGENCY REQ NO. :
TOPS REQ NO. : 1041692
FISCAL YEAR : 00
EFFECTIVE DATE : 08/01/99
EXPIRATION DATE : 07/31/00
DELIVERY CONTACT : LORRAINE EDWARDS
DELIVERY PHONE : 615-741-2714-0000

TELEPHONE SERVICE, TOLL FREE
RESTRICTED

1. ORDERING PERIOD: CONTRACT BEGIN ORDERING PERIOD DATE IS: 08/01/99
CONTRACT END ORDERING PERIOD DATE IS: 07/31/00
2. F.O.B. POINT: DESTINATION
3. DELIVERY: DELIVERY WILL BE MADE WITHIN: 030 DAYS ARO
UNLESS SPECIFIED DIFFERENTLY ON EACH LINE OR UNLESS
AN ALTERNATE DELIVERY SCHEDULE IS INDICATED. AN
ALTERNATE DELIVERY SCHEDULE IS ENCLOSED HEREIN: NO
4. PROMPT PAYMENT TERMS: PROMPT PAYMENT TERMS ARE: N/A
5. BID REFERENCE NO.: YOUR BID REFERENCE NUMBER IS: N/A
6. AWARDED LINES: YOU WERE AWARDED 00022 LINES FROM THE SOLICITATION NUMBER 2040410.
THESE LINES ARE INCLUDED AS A PART OF THIS CONTRACT.
7. THE TOTAL PURCHASES OF ANY INDIVIDUAL ITEM ON THE CONTRACT IS NOT KNOWN. THE PURCHASING DIVISION HAS
ATTEMPTED TO GIVE AN ACCURATE ESTIMATE OF PROBABLE PURCHASES OF EACH ITEM FROM THE CURRENT CONTRACT PERIOD
AND PROJECTED ESTIMATES FOR THE NEW CONTRACT PERIOD. THE PURCHASING DIVISION DOES NOT GUARANTEE THAT THE
STATE WILL BUY ANY OR ALL ESTIMATED AMOUNTS OF ANY SPECIFIED ITEM OR ANY TOTAL AMOUNT.

ALL TERMS AND CONDITIONS AS A PART OF SOLICITATION 2040410 INCLUDING ANY AMENDMENTS
THERETO AND ALSO INCLUDING THE BIDDER'S PROPOSAL AS ACCEPTED BY THE STATE ARE
INCLUDED HEREIN BY REFERENCE AND MADE PART HEREOF EXCEPT AS SPECIFIED HEREIN.

APPROVED:

DIRECTOR OF PURCHASING

BY:

*** ORIGINAL SIGNED ***

DATE

EXTRA COPY 1

FORM XXXXX

TERMS AND CONDITIONS	STATEWIDE CONTRACT (MY)	
BIDDER : QWEST/LCI	NUMBER : 4021777 SWC NUMBER : 3048	PAGE 2

SPECIFICATIONS

STATEWIDE CONTRACT FOR INCOMING TOLL FREE CALLING FOR THE STATE OF TENNESSEE; RESTRICTED FOR DEPARTMENT OF FINANCE AND ADMINISTRATION, OFFICE OF INFORMATION RESOURCES, TELECOMMUNICATIONS MANAGEMENT FOR USE AT STATE AGENCIES.

THE STATE CURRENTLY UTILIZES TOLL FREE CALLING SERVICE APPLICATIONS TO IMPROVE CUSTOMER SERVICE BY ALLOWING USERS TO PLACE CALLS TO A STATE AGENCY THAT ARE BILLED TO THE AGENCY.

1. SCOPE OF CONTRACT: TO PROVIDE INCOMING TOLL FREE CALLING TO SPECIFIED AGENCIES WITHIN THE STATE OF TENNESSEE AS DIRECTED.
2. THE CONTRACTOR SHALL PROVIDE THE STATE OF TENNESSEE WITH AN UNINTERRUPTED CONVERSION FROM EXISTING TOLL FREE SERVICE. CONTRACT PRICING SHALL INCLUDE ALL COST FOR IMPLEMENTATION FOR REQUIRED SERVICE AND/OR FEATURES OF SERVICE SUCH AS DEDICATED ACCESS FOR EXISTING FACILITIES OR REQUESTED NEW SERVICE. THE STATE WILL RETAIN ALL EXISTING TOLL FREE NUMBERS CURRENTLY IN USE. THE STATE CURRENTLY HAS 303 INCOMING TOLL FREE NUMBERS WORKING AND PROVIDED SERVICE BY MCI.
3. THE CONTRACTOR MUST PROVIDE A CENTRALIZED CALL REPORTING POSITION THAT IS TWENTY-FOUR (24) HOURS A DAY, SEVEN (7) DAYS A WEEK TO INCLUDE HOLIDAYS AND WEEKENDS. SERVICE REPAIRS TO BE COMPLETED WITHIN TWO (2) HOURS OF NOTIFICATION BY AN AUTHORIZED STATE REPRESENTATIVE.
4. THE CONTRACTOR SHALL FULLFILL EACH WRITTEN REQUEST FOR MOVES, ADDS, OR CHANGES WITHIN FIVE (5) CALENDAR DAYS FROM REQUEST, UNLESS AGREED UPON BY BOTH PARTIES.
5. UPON SATISFACTORY COMPLETION OF THIRTY (30) DAY ACCEPTANCE PERIOD, THE STATE SHALL ISSUE WRITTEN NOTIFICATION OF SERVICE ACCEPTANCE. IN THE EVENT THAT THE SERVICES DO NOT MEET ALL STATE REQUIREMENTS DURING THE INITIAL 30 CALENDAR DAYS, THE PERFORMANCE PERIOD SHALL CONTINUE ON A DAY-TO-DAY BASIS UNTIL ALL REQUIREMENTS HAVE BEEN MET FOR THIRTY (30) CONSECUTIVE CALENDAR DAYS. IF THE CONTRACTOR FAILS TO GAIN SERVICE ACCEPTANCE WITHIN NINETY (90) CALENDAR DAYS FROM CUTOVER, THE STATE MAY TERMINATE THE CONTRACT. IF, AFTER ACCEPTANCE, EXCEPT IN CASES OF FORCE MAJEURE, THE CONTRACTOR FAILS TO MEET THE TECHNICAL PERFORMANCE REQUIREMENT, THE CONTRACT MAY BE CANCELLED AT THE STATE'S EXCLUSIVE OPTION. THE STATE MAY ALSO WITHHOLD PAYMENTS IN EXCESS OF FAIR COMPENSATION FOR WORK COMPLETED OR SERVICES RENDERED. THE STATE SHALL HAVE NO TERMINATION LIABILITY IF THE CONTRACT IS CANCELLED.
6. BILLING: A MAGNETIC BILLING TAPE OR CD ROM IS REQUIRED AND MUST BE DELIVERED EACH MONTH AT NO EXTRA CHARGE TO THE STATE. THE MAGNETIC TAPE OR CD ROM MUST BE COMPATIBLE FOR USE WITH COMPUTER EQUIPMENT (HARDWARE AND SOFTWARE) USED BY THE STATE AND MUST BE OPERATIONAL.

TERMS AND CONDITIONS

STATEWIDE CONTRACT (MY)

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7. THE MAGNETIC TAPE OR CD ROM MUST PROVIDE ALL CALL ACTIVITY AND BILLING INFORMATION. THE BILLING INFORMATION ON THE TAPE OR CD ROM SHALL BE MATCHED WITH THE CONTRACT LINE COMMODITY CODES USED BY THE STATE AND SUBMITTED CONTRACTOR INVOICES.
8. ALL CHARGES SHALL BE PRESENTED ON MAGNETIC TAPE OR CD ROM AND BILLED TO THE TOLL FREE NUMBER THAT INCURRED SAID CHARGES. THESE CHARGES ARE TO INCLUDE COIN CHARGES, FEATURE CHARGES, ETC. CALL CHARGES WILL BE BILLED AS A 60 TYPE RECORD, WHILE ONE TIME OR MONTHLY CHARGES WILL BE BILLED AS A 70 TYPE RECORD (FORMAT FOR THE MAGNETIC TAPE OR CD ROM MAY BE FOUND AT PARAGRAPH 12). IF AT ANY TIME THE CONTRACTOR IS UNABLE TO SUBMIT ACCURATE CALL DETAIL INFORMATION IN THE REQUIRED FORMAT, THE STATE MAY, AT ITS SOLE OPTION, REFUSE PAYMENT OF THE CONTRACTOR'S INVOICES FOR ANY AND ALL CALLS OR MONTHLY CHARGES NOT SUPPORTED BY THE MAGNETIC TAPE OR CD ROM RECORDS, OR MAY DELAY PAYMENTS WITHOUT PENALTY UNTIL THE CALL DETAIL REPORT IS ACCEPTED.
9. AN OPERATIONAL TAPE OR CD ROM MUST BE PROVIDED TO AND APPROVED BY THE DEPARTMENT OF FINANCE AND ADMINISTRATION, OFFICE OF INFORMATION RESOURCES, BILLING SERVICES AS FUNCTIONAL WITHIN THIRTY (30) CALENDAR DAYS AFTER CUTOVER.
10. CONTRACTOR WILL BE IMPOSED A PENALTY OF \$1,000.00 IF A READABLE MAGNETIC TAPE OR CD ROM IS NOT DELIVERED BY THE 10TH OF THE MONTH. ADDITIONALLY, A PENALTY OF \$100.00 PER DAY WILL BE CHARGED BEYOND THAT DATE UNTIL AN OPERATIONAL TAPE OR CD ROM IS DELIVERED.
11. THE CONTRACTOR SHALL PROVIDE COMPILED TRAFFIC STATISTICS, MAINTENANCE INFORMATION AND OPERATIONAL REPORTS AS REQUIRED BY THE STATE. THE INFORMATION SHALL BE PROVIDED MONTHLY ON A CD ROM AT NO COST TO THE STATE. THE CONTRACTOR SHALL PROVIDE TRAINING TO STATE PERSONNEL ON THE USE OF THIS SOFTWARE AND PROVIDE SUPPORT VIA TELEPHONE THROUGHOUT THE TERM OF THE CONTRACT.

12. MAGNETIC BILLING TAPE OR CD ROM SPECIFICATIONS
(TAPE OR CD ROM PHYSICAL CHARACTERISTICS)

TRACKS	9			
DENSITY	6250			
PARITY	ODD			
PHASE	ENCODED			
CHARACTER	EBCDIC			
INTERNAL	STANDARD OPERATING SYSTEM (IBM COMPATIBLE)			
FILE QUALITY	1 PER BILLING REVENUE ACCOUNTING OFFICE			
RECORD LENGTH	450 CHARACTER, FIXED LENGTH			
BLOCK SIZE	22,500 CHARACTER, FIXED LENGTH			
BLOCKING FACTOR	50 RECORD/BLOCK			
RECORD NAME	CAP			
RECORD LENGTH	150			
FIELD NAME	PIC	ATTR	SIZE	POS
RECORD NO.	9(2)	9DR	2	6-7 (VALUE=60)
SUB RECORD NO.	9(2)	9DR	2	8-9 (VALUE=00)

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STATEWIDE CONTRACT (MY)

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SUB RECORD NO.	9(2)	9DR	2	8-9 (VALUE-00)
EARNING ACCOUNT NO.	X(13)	XDL	13	44-56
BILL PAGE NUMBER	9(6)	9DR	6	64-69
CUSTOMER ID	X(25)	XDL	25	99-123

12.1 MAGNETIC BILLING TAPE OR CD ROM SPECIFICATIONS (CONTINUED)

RECORD NAME	ITEMIZED CALL DETAIL			
RECORD NUMBER	60			
RECORD LENGTH	450			
FIELD NAME	PIC	ATTR	SIZE	POS
CAP			150	1-150
BILL PAGE MINUTES	X(1)	XDL	4	151-154
BILL PAGE TENTHS	X(1)	XDL	1	155
ADDITIONAL DISCOUNT	X(1)	XDL	1	184
DATE OF RECORD (YYMMDD)	9(6)	9DR	6	237-242
FROM NUMBER	X(10)	XDL	10	245-254
TO NUMBER	X(10)	XDL	10	260-269
CHARGE - \$	S9(4)V99	SDR	6	270-275
STATE TAX	S9 (4)V99	SDR	4	278-281
LINE SURCHARGE	S9(3)V99	SDR	5	278-282
CONNECT TIME	X(6)	XDL	6	285-290
HOUR			(2)	285-290
MINUTES			(2)	287-288
SECONDS			(2)	289-290
BILLING OR REPORTED TIME	X(7)	XDL	7	291-297
MINUTES			(4)	291-294
SECONDS			(2)	295-296
1/10 SECONDS			(1)	297
RATE CLASS	X(1)	XDL	1	309
MESSAGE	X(1)	XDL	1	310
IND 13 TAX OTHER LINE CHG	9(1)	9DR	1	324
NORTH AMERICA FROM PLACE	X(10)	XDL	10	353-362
NORTH AMERICA FROM STATE	X(2)	XDL	2	363-364
NORTH AMERICA TO PLACE	X(10)	XDL	10	353-362
NORTH AMERICA TO STATE	X(2)	XDL	2	363-364
SETTLEMENT CODE	X(1)	XDL	1	379
IX CARRIER IDENTIFICATION	X(4)	XDL	4	380-383
RERATE INFORMATION	X(4)	XDL	4	384-387
(SECONDARY CIC CODE)				
IND 21-EQUAL ACCESS DIALING	9(1)	9DR	1	388
FILLER	X(7)	XDL	7	389-395
IND 29-PSEUDO CARRIER	9(1)	9DR	1	396
IND 30-MISC.	9(1)	9DR	1	397
ADMIN CHARGE	9(3)	9DR	3	398-400
DACC NUMBER OF CALLS-6 BYTE	X(6)	XDL	6	401-406
LOCAL USE	X(28)	XDL	28	407-434
ASSOCIATION FIELDS				
ASSOCIATION CODE	X(4)	XDL	4	435-438
ASSOCIATION NAME	X(12)	XDL	12	439-450

12.2 MAGNETIC BILLING TAPE OR CD ROM SPECIFICATIONS (CONTINUED)

RECORD NAME	ITEMIZED CALL DETAIL
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RECORD NAME	ITEMIZED CALL DETAIL			
RECORD NUMBER	70			
RECORD LENGTH	450			
FIELD NAME	PIC	ATTR	SIZE	POS
CAP			150	1-150
EFFECTIVE DATE	9(6)	9DR	6	151-156
CLASS OF SERVICE USOC	X(5)	XDL	5	157-161
USOC	X(5)	XDL	5	162-166
SPECIAL PRICING PLAN	X(3)		3	167-169
NATIONAL USE	X(2)		2	170-171
ACTIVITY IND	X(1)		1	172
QUANTITY	X(5)	9DR	5	173-177
USOC RATE CURRENT - \$	S9(9)V99	SCR	11	178-188
USOC AMT CURRENT - \$	S9(9)V99	SCR	11	189-199
TERMINATION CODE	X(3)	XDL	3	200-202
NPA-CITY TAX TAR	X(1)	XDL	1	203
CITY TAX TAR	9(3)	9DR	3	204-206
NPA-COUNTY TAX TAR	X(1)	XDL	1	207
COUNTY TAX TAR	9(3)	9DR	3	208-210
USOC AMT-OLD	S9(9)V99	SDR	11	211-221
VARIABLE RATE IND	X(1)	XDL	1	222
CARR ACCESS LINE CHG. IND	X(1)	XDL	1	223
NUMBER OF CONTRACT MONTHS	9(3)	9DR	3	224-226
CONTRACT DATE	9(3)	9DR	6	227-232
CONTRACT NUMBER	X(10)	XDL	10	233-242
TAX STATUS IND-FED	X(1)	XDL	1	243
TAX STATUS IND-STATE	X(1)	XDL	1	244
TAX STATUS IND-COUNTY	X(1)	XDL	1	245
TAX STATUS IND-CITY	X(1)	XDL	1	246
TAX STATUS IND-FRANCHISE	X(1)	XDL	1	247
TAX STATUS IND- GROSS	X(1)	XDL	1	248
RECEIPTS				
KEY SYSTEMS NUMBER	X(5)	XDL	5	249-253
CTX LOCATION	X(5)	XDL	4	254-258
EQUIPMENT CATEGORY CODE	X(1)	XDL	1	259
CIRCUIT NUMBER	X(42)	XDL	42	260-301
STATION NUMBER	X(10)	XDL	10	302-311
SWITCHBOARD	X(2)	XDL	2	312-313
LOCAL EXTENSION	X(3)	XDL	3	314-316
RAO	X(3)	XDL	3	317-324
DPA/CIRCUIT LOC CODE	X(5)	XDL	5	320-324
REFERENCE CODE	X(2)	XDL	2	325-326
EXPLANATION	X(80)	XDL	80	327-406
SLA NUMBER	X(3)	XDL	3	407-409
PACKAGE USOC	X(5)	XDL	5	410-414
PACKAGE IND	X(1)	XDL	5	415
PACKAGE ID	X(5)	XDL	5	416-427
NATIONAL USE	X(12)	XDL	12	428-439
CIRCUIT/STATION IND	X(1)	XDL	1	440
EXPLANATION IND	X(1)	XDL	1	441
ISDN IND	X(1)	XDL	1	442
LOCAL USE	X(10)	XDL	10	443-450

13.0 DEFINITIONS FOR LINE ITEM DESCRIPTIONS

TERMS AND CONDITIONS		STATEWIDE CONTRACT (MY)	
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13.0 DEFINITIONS FOR LINE ITEM DESCRIPTIONS

13.1 DEDICATED (LINE ITEMS 1 AND 2): INCOMING TOLL FREE CALLS WHICH TERMINATE DIRECTLY FROM A CARRIER TO AN ESSX.

13.2 SWITCHED (LINE ITEMS 3 AND 4): INCOMING TOLL FREE CALLS WHICH TERMINATE OVER THE SWITCHED NETWORK.

13.3 LOCAL BLOCKING (LINE ITEMS 5 AND 6): BLOCKING LOCAL CALLS TO A TOLL FREE NUMBER TO PREVENT CHARGES ON A LOCAL CALL.

13.4 PAY STATION SURCHARGE (LINE ITEM 7): CHARGES ASSOCIATED WITH CALLS TO A TOLL FREE NUMBER THAT ORIGINATES FROM A PAY STATION.

13.5 EMERGENCY ROUTING (LINE ITEMS 8 AND 9): THIS FEATURE ALLOWS THE STATE TO CHANGE THE ROUTING IN THE EVENT OF A NATURAL DISASTER, POWER OUTAGE OR OTHER SERVICE DISRUPTION.

13.6 BLOCKING ORIGINATING CALLS (LINE ITEMS 10 AND 11): BLOCKING CALLS THAT ORIGINATE FROM A SPECIFIC AREA (STATE, NPA, NPA/NXX OR COUNTRY).

13.7 TOLL FREE INTERNATIONAL (LINE ITEMS 12 AND 13): TOLL FREE CALLING FROM SELECTED COUNTRIES. INTERNATIONAL AND DOMESTIC CALLS CAN BE RECEIVED ON SAME LINE.

13.8 ORIGINATING ROUTING (LINE ITEMS 14 AND 15): THE TERMINATING TOLL FREE NUMBER ROUTING IS DETERMINED BY THE LOCATION OF THE ORIGINATING LINE. STATE, NPA, NAP/NXX OR COUNTRY CAN DEFINE THE ORIGINATING NUMBER GROUP.

13.9 HOLIDAY ROUTING (LINE ITEMS 16 AND 17): THIS OPTION ALLOWS THE STATE TO SPECIFY DIFFERENT ROUTING FOR HOLIDAYS OR SPECIAL EVENTS.

13.10 TIME OF DAY ROUTING (LINE ITEMS 18 AND 19): THIS OPTION ALLOWS THE STATE TO ROUTE CALLS MADE TO A SINGLE TOLL FREE NUMBER TO TERMINATE TO A DIFFERENT LOCAL NUMBER DEPENDANT ON THE TIME OF DAY.

13.11 PERCENTAGE ROUTING (LINE ITEMS 20 AND 21): THIS FEATURE WILL ALLOW THE STATE TO ROUTE CALLS TO DIFFERENT NUMBERS BY THE PERCENT OF CALLS.

PRICE SHEET		STATEWIDE CONTRACT (MY)		
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LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
	UNLESS SPECIFIED ELSEWHERE, SHIP TO: STATEWIDE			
00001	COMMODITY CODE: 938-39-042676 DEDICATED - CHARGE PER MINUTE INTERSTATE AS PER ATTACHED SPECIFICATIONS	MIN	\$.04200	N/A
00002	COMMODITY CODE: 938-39-042677 DEDICATED - CHARGE PER MINUTE INTRASTATE -INTERLATA AS PER ATTACHED SPECIFICATIONS	MIN	\$.04200	N/A
00003	COMMODITY CODE: 938-39-043267 DEDICATED-CHARGE PER MINUTE INTRASTATE- INTRALATA AS PER ATTACHED SPECIFICATIONS	MIN	\$.04200	N/A
00004	COMMODITY CODE: 938-39-042678 SWITCHED - CHARGE PER MINUTE INTERSTATE AS PER ATTACHED SPECIFICATIONS	MIN	\$.07000	N/A
00005	COMMODITY CODE: 938-39-042680 SWITCHED - CHARGE PER MINUTE INTRASTATE INTERLATA AS PER ATTACHED SPECIFICATIONS	MIN	\$.07000	N/A
00006	COMMODITY CODE: 938-39-043268 SWITCHED-CHARGE PER MINUTE INTRASTATE- INTRALATA AS PER ATTACHED SPECIFICATIONS	MIN	\$.07000	N/A
00007	COMMODITY CODE: 938-39-042681 LOCAL CALL BLOCKING - PER TOLL FREE NUMBER AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A
00008	COMMODITY CODE: 938-39-042682 LOCAL CALL BLOCKING - PER CALL AS PER ATTACHED SPECIFICATIONS	MIN	\$.00000	N/A
00009	COMMODITY CODE: 938-39-042683 PAY STATION (COIN CHARGE) SURCHARGE - PER CALL AS PER ATTACHED SPECIFICATIONS	EA	\$.35000	N/A
00010	COMMODITY CODE: 938-39-042684 EMERGENCY ROUTING - PER TOLL FREE NUMBER AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A
00011	COMMODITY CODE: 938-39-042685 EMERGENCY ROUTING - PER CALL AS PER ATTACHED SPECIFICATIONS	MIN	\$.00000	N/A
00012	COMMODITY CODE: 938-39-042686 BLOCKING ORIGINATING CALLS - PER TOLL FREE NUMBER AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A

PRICE SHEET		STATEWIDE CONTRACT (MY)		
BIDDER : QWEST/LCI		NUMBER : 4021777 SWC NUMBER : 3048		PAGE 8
LINE NO.	COMMODITY/SERVICE DESCRIPTION	UNIT	UNIT PRICE	DISCOUNT OFF CATALOG PRICE
00013	COMMODITY CODE: 938-39-042687 BLOCKING ORIGINATING CALLS - PER CALL AS PER ATTACHED SPECIFICATIONS	MIN	\$.00000	N/A
00016	COMMODITY CODE: 938-39-042690 ORIGINATING ROUTING - PER TOLL FREE NUMBER AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A
00017	COMMODITY CODE: 938-39-042691 ORIGINATING ROUTING - PER CALL AS PER ATTACHED SPECIFICATIONS	MIN	\$.00000	N/A
00018	COMMODITY CODE: 938-39-042692 HOLIDAY ROUTING - PER TOLL FREE NUMBER AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A
00019	COMMODITY CODE: 938-39-042693 HOLIDAY ROUTING - PER CALL AS PER ATTACHED SPECIFICATIONS	MIN	\$.00000	N/A
00020	COMMODITY CODE: 938-39-042694 TIME OF DAY ROUTING - PER TOLL FREE NUMBER AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A
00021	COMMODITY CODE: 938-39-042695 TIME OF DAY ROUTING - PER CALL AS PER ATTACHED SPECIFICATIONS	MIN	\$.00000	N/A
00022	COMMODITY CODE: 938-39-042696 PERCENTAGE ROUTING - PER TOLL FREE NUMBER AS PER ATTACHED SPECIFICATIONS	EA	\$.00000	N/A
00023	COMMODITY CODE: 938-39-042697 PERCENTAGE ROUTING - PER CALL AS PER ATTACHED SPECIFICATIONS	MIN	\$.00000	N/A
00030	COMMODITY CODE: 938-39-042704 UNIVERSAL SERVICE/ACCESS FEE - TOLL FREE TELEPHONE SERVICE AS PER ATTACHED SPECIFICATIONS	PCT	N/A	+5.90

BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

NOVEMBER 18, 1999

IN RE:

APPLICATION OF FRONTIER LOCAL
SERVICES INC. FOR A CERTIFICATE
TO PROVIDE COMPETING
TELECOMMUNICATIONS SERVICES

Docket No. 99-00120

ORDER GRANTING CERTIFICATE OF
CONVENIENCE AND NECESSITY

On May 18, 1999, this matter came before the Tennessee Regulatory Authority ("Authority") upon the Application of Frontier Local Services Inc. ("FLSI") for a Certificate to Provide Competing Local Telecommunications Services, with which it intends to offer a broad variety of telecommunications services within the State of Tennessee (the "Application"). The Application was made pursuant to Tenn. Code Ann. § 65-4-201 *et seq.*

LEGAL STANDARD FOR GRANTING CCN

FLSI's Application was considered in light of the criteria for granting a certificate of public convenience and necessity ("CCN") as set forth in applicable statutes. Tenn. Code Ann. § 65-4-201 provides, in part:

(a) No public utility shall establish or begin the construction of, or operate any line, plant, or system, or route in or into a municipality or other territory already receiving a like service from another public utility, or establish service therein, without first having obtained from the authority, after written application and hearing, a certificate that the present or future public convenience and necessity require or will require such construction, establishment, and operation, and no person or corporation not at the time a public utility shall commence the construction of any plant, line, system or route to be operated as a public utility,

FILE

or the operation of which would constitute the same, or the owner or operator thereof, a public utility as defined by law, without having first obtained, in like manner, a similar certificate . . .

* * *

(c) After notice to the incumbent local exchange telephone company and other interested parties and following a hearing, the authority shall grant a certificate of convenience and necessity to a competing telecommunications service provider if after examining the evidence presented, the authority finds:

(1) The applicant has demonstrated that it will adhere to all applicable commission policies, rules and orders; and

(2) The applicant possesses sufficient managerial, financial, and technical abilities to provide the applied for services.

An authority order, including appropriate findings of fact and conclusions of law, denying or approving, with or without modification, an application for certification of a competing telecommunications service provider shall be entered no more than sixty (60) days from the filing of the application.

(d) Subsection (c) is not applicable to areas served by an incumbent local exchange telephone company with fewer than 100,000 total access lines in this state unless such company voluntarily enters into an interconnection agreement with a competing telecommunications service provider or unless such incumbent local exchange telephone company applies for a certificate to provide telecommunications services in an area outside its service area existing on June 6, 1995.

In addition, pursuant to Tenn. Code Ann. § 65-5-212, competing telecommunications providers are required to file with the Authority (1) a plan containing the provider's plan for purchasing goods and services from small and minority-owned telecommunications businesses; and (2) information on programs that might provide technical assistance to such businesses.

INTERVENORS

Public notice of the hearing in this matter was made by the Authority's Executive Secretary, pursuant to Tenn. Code Ann. § 65-4-204. No interested persons sought intervention prior to hearing.

FLSI'S HEARING

FLSI's Application was uncontested. At the hearing held on May 18, 1999, Mr. Michael J. Nighan, FLSI's Director - Regulatory Affairs, presented testimony and was subject to examination by the Authority's Directors. At the conclusion of the hearing, the Authority took the matter under advisement and directed FLSI to refile its small and minority-owned telecommunications business participation plan and to provide additional information to clarify and correct certain information provided to the Authority by Global Crossing Ltd., which was in the process of acquiring FLSI's parent company. Subsequent to the hearing, Global Crossing Ltd. provided the requested information and FLSI refiled its small and minority-owned telecommunications business participation plan. At the Authority's hearing held on September 14, 1999, the Authority reconsidered FLSI's Application and granted the Application based upon the following findings of fact and conclusions of law:

I. APPLICANT'S QUALIFICATIONS

1. As a corporation organized under the laws of the State of Michigan on January 4, 1995, FLSI was qualified to transact business in Tennessee on February 16, 1999.
2. The complete street address of FLSI's principal place of business is 180 South Clinton Avenue, Rochester, New York 14646. The phone number is (716) 777-8456 and fax number is (716) 232-3646.
3. The Application and supporting documentary information existing in the record indicate that FLSI has the requisite technical and managerial qualifications necessary to provide telecommunications services within the State of Tennessee on a facilities-based and resale basis. FLSI's management and technical teams have extensive expertise in the telecommunications industry. FLSI's affiliate, Frontier Communications Services, Inc., is currently authorized to resell services in Tennessee. Furthermore, FLSI is currently authorized to provide telecommunications services on a facilities-based and/or resale basis in at least fifteen states.

4. FLSI has the necessary capital and financial capability to provide the services it proposes to offer.

5. FLSI has represented that it will adhere to all applicable policies, rules and orders of the Authority.

II. PROPOSED SERVICES

1. FLSI intends to offer a full array of telecommunications services throughout the State of Tennessee on a facilities-based and resale basis. Specifically, FLSI intends to offer a broad range of local exchange services, interexchange services, exchange access, and switched and special access services. FLSI's target market for its facilities-based services will be primarily business users.

2. Except as may be authorized by law, FLSI does not intend to provide local exchange service in any areas currently being served by an incumbent local telephone company with fewer than 100,000 total access lines where local exchange competition is prohibited pursuant to Tenn. Code Ann. § 65-4-201(d).

III. PERMITTING COMPETITION TO SERVE THE PUBLIC CONVENIENCE AND NECESSITY

1. Upon a review of the Application and the record in this matter, the Authority finds that approval of FLSI's application would inure to the benefit of the present and future public convenience by permitting competition in the telecommunications services markets in the State and by fostering the development of an efficient technologically advanced statewide system of telecommunications services.

IV. SMALL AND MINORITY-OWNED TELECOMMUNICATIONS BUSINESS PARTICIPATION PLAN & BUSINESS ASSISTANCE PROGRAM

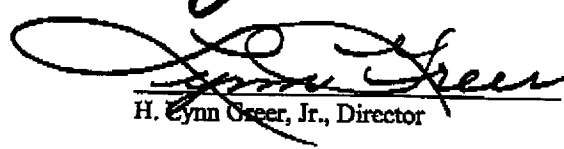
1. FLSI has filed a satisfactory small and minority-owned telecommunications business participation plan, pursuant to Tenn. Code Ann. § 65-5-212 and the Authority's Rules.


2. FLSI has acknowledged its obligation to contribute to the funding of the small and minority-owned telecommunications business assistance program, as set forth in Tenn. Code Ann. § 65-5-213.

IT IS THEREFORE ORDERED THAT:

1. FLSI's Application is approved as applied for;
2. Any party aggrieved by the Authority's decision in this matter may file a Petition for Reconsideration with the Authority within ten (10) days from and after the date of this Order; and
3. Any party aggrieved by the Authority's decision in this matter has the right of judicial review by filing a Petition for Review in the Tennessee Court of Appeals, Middle Section, within sixty (60) days from and after the date of this Order.

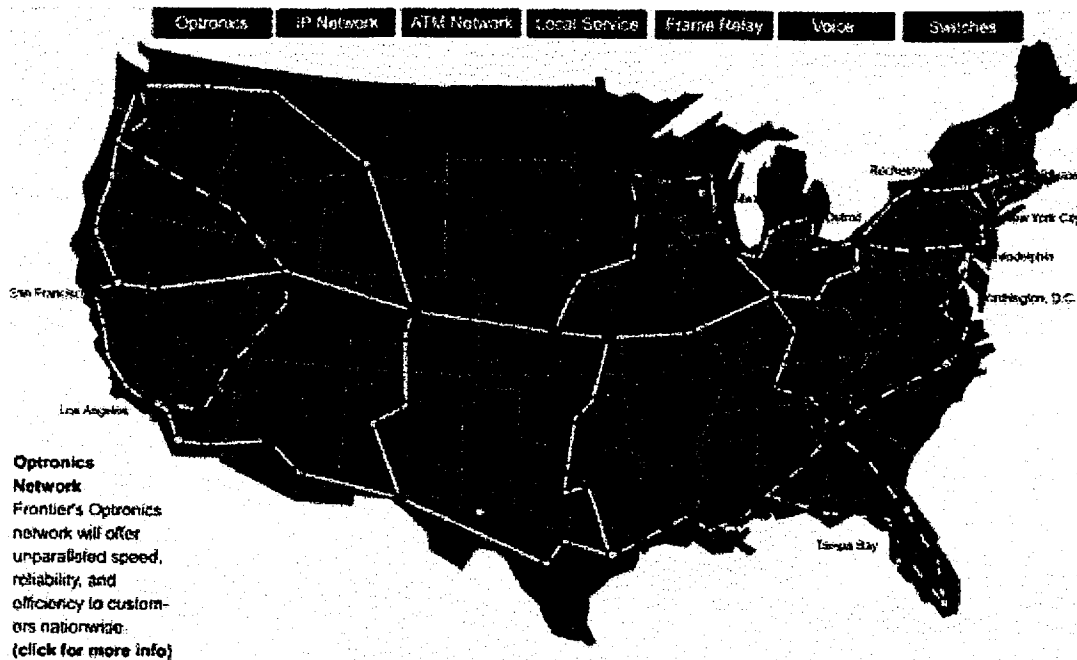

Melvin J. Malone, Chairman


H. Lynn Greer, Jr., Director


Sara Kyle, Director

ATTEST:


K. David Waddell, Executive Secretary



**BEFORE THE
TENNESSEE REGULATORY AUTHORITY**

REC'D
REGULATORY
DEC 2 1994
EX-101-1000

Application of)

QWEST COMMUNICATIONS CORPORATION)

For a Certificate of Public Convenience)
And Necessity to Provide Competing)
Local Telecommunications Services)
Within the State of Tennessee.)

Docket No. 99-00922

**Application of Qwest Communications Corporation for a Certificate of
Public Convenience and Necessity**

Pursuant to TENN. CODE ANN. § 65-4-201 and to Chapter 1220-4-8-.02 of the Tennessee Regulatory Authority's ("TRA's") regulations for local telecommunications service providers, QWEST COMMUNICATIONS CORPORATION ("QCC" or "Applicant"), by its attorneys, hereby respectfully requests the TRA grant it the authority to provide local telecommunications between and among locations within the State of Tennessee.

As demonstrated below, QCC's Application for a Certificate of Public Convenience and Necessity to provide competing local telecommunications services in the State of Tennessee ("Application") satisfies the requirements set forth in TENN. CODE ANN. § 65-4-201 and in Chapter 1220-4-8-.02 of the TRA's rules. The Applicant has confirmed that it will adhere to all

**QWEST COMMUNICATIONS CORPORATION
APPLICATION FOR CPCN
TENNESSEE**

applicable TRA policies, rules, and orders. Moreover, the increased competition that QCC will bring to the State of Tennessee has the potential to reduce prices, create new jobs, and increase financial investments. As a result, QCC's Application is in the public interest and accordingly, should be granted by the TRA

In support of its Application, QCC submits the following information:

I. DESCRIPTION OF THE APPLICANT AND ITS CORPORATE AUTHORITY

A. CORPORATE INFORMATION

1. QCC is a domestic corporation duly organized and existing under the laws of the State of Delaware. A copy of QCC's Articles of Incorporation is appended hereto as *Exhibit A*. A copy of QCC's Authorization to transact business in the State of Tennessee is appended hereto as *Exhibit B*.

2. QCC is headquartered at:

QWEST COMMUNICATIONS CORPORATION
555 Seventeenth Street
Denver, Colorado 80202
(303) 992-1400



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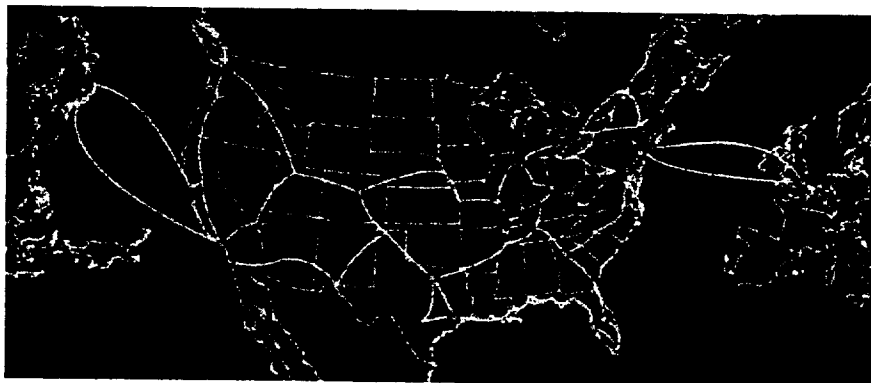
Network Plan

Level 3 is building the first international communications network using Internet Protocol (IP) technology. The entire network, along with the operating support systems, is being designed to be upgradable, allowing Level 3 to not only build its networks using the most advanced technology today, but to be able to take advantage of future technological changes. The Level 3 network will help bring Silicon Economics to Communications.

Network Components

The Level 3 network will combine local, long distance, and undersea networks, connecting customers end-to-end across the U.S. and in Europe and Asia. A 16,000 mile inter-city network will connect more than 150 markets in the U.S., including 56 markets in which Level 3 will build local facilities. Throughout Europe and the Pacific rim, local facilities will be built in 23 markets. Each European market will be connected by an approximate 5,000 mile inter-city network. These high capacity networks in the U.S. and Europe will be connected by a transAtlantic terabit cable system.

The following map depicts the pre-funded portion of the planned international network. Select cities began providing services as early as the fourth quarter of 1998 using leased fiber facilities. Construction of the networks is underway in the U.S. and Europe.



- Markets Providing Service At The End Of 1998
- Markets Providing Service To Be Added By The End Of 1999
- Intercity (long distance) Network Completed Or Under Development

▲TOP

Level 3's Multi-Conduit Network is Designed to be Continuously Upgradeable

Network can evolve as technology changes and customer demand for capacity increases

even newer ones tomorrow. Because Level 3 is a user of these technologies, it wants to ensure that it is able to change and adapt as the technology changes and adapts. For this reason, Level 3 is designing a network that is continuously upgradeable. The physical infrastructure of the network will include installation of ten to twelve conduits throughout the land-based portion of the network. Only one of the conduits will initially have fiber running through it, while the rest will be empty. This is nine to eleven times as many "spare" conduits as most traditional telephone companies, which typically have a single fiber optic cable "direct buried" or in a conduit.

Technology is adapting and changing rapidly – fiber is now in its third generation this decade. This same fast-paced evolution will continue to occur, and by laying a multi-conduit network, Level 3 will be able to adapt to these new changes to give customers quality connections at lower costs without removing old fiber or disrupting service.

Level 3 is taking this same, upgradeable approach to the design of its network electronics and to its software automation systems.

ΔTOP

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Legal Conditions, Terms of Use, and Tariffs.

**BEFORE THE
TENNESSEE REGULATORY AUTHORITY**

In the Matter of the Application of)
)
Level 3 Communications, LLC)
)
for a Certificate of Convenience and)
Necessity to Provide Local Exchange)
and Interexchange Telecommunications)
Services Throughout the State of Tennessee)

Docket No. 98-00610

APPLICATION

I. INTRODUCTION

Pursuant to the provisions of T.C.A. §§ 65-4-201, Administrative Rules Chapter 1220-4-2, and the Federal Telecommunications Act of 1996 ("Federal Act" or "Act"), 47 U.S.C. § 251 *et seq.*, Level 3 Communications, LLC ("Level 3" or "Applicant") hereby files this application for a Certificate of Convenience and Necessity to provide all forms of facilities-based and resold local exchange and interexchange telecommunications services throughout the State of Tennessee.

Consistent with the objectives of the Federal Act, the Tennessee Regulatory Authority ("Authority") has adopted a policy favoring competition in all telecommunications markets, recognizing that it is in the public interest to develop effective competition to ensure that all consumers, residential and business, will have access to high quality, low-cost, and innovative telecommunications services, regardless of the chosen service provider. In support of its application, Level 3 provides the following information:

II. DESCRIPTION OF THE APPLICANT

1. Applicant's legal name is Level 3 Communications, LLC. Applicant maintains its principal place of business at:

Level 3 Communications, LLC
1450 Infinite Drive
Louisville, CO 80027
Telephone: (303) 926-3000
Facsimile: (303) 926-3400

2. All correspondence, notices, inquiries or other communications pertaining to this application, and questions concerning the ongoing operations of Level 3 following certification, should be addressed to:

Terrence J. Ferguson
Senior Vice President and General Counsel
Level 3 Communications, LLC
3555 Farnam Street
Omaha, NE 58131
Telephone: (402) 536-3624
Facsimile: (404) 536-3645

3. Level 3 is a limited liability company organized on December 1, 1997 under the laws of Delaware. As a limited liability company, Level 3 is owned by its sole member company, PKS Information Services, Inc. ("PKS"), which in turn is wholly owned by Level 3 Communications, Inc. Level 3 is qualified to do business in the State of Tennessee. A copy of Level 3's Certificate of Formation and its operating agreement (by-laws) and a copy of Level 3's Certificate of Authority to Transact Business in the State of Tennessee are attached hereto as Exhibit A.

4. The names, addresses and telephone numbers of Level 3's officers are as follows:

James Q. Crowe	President, Chief Executive Officer
R. Douglas Bradbury	Executive Vice President, Chief Financial Officer and Treasurer
Kevin J. O'Hara	Executive Vice President
Terrence J. Ferguson	Senior Vice President, General Counsel and Secretary
Daniel Caruso	Senior Vice President
Michael Frank	Senior Vice President
Mike Jones	Senior Vice President and Chief Information Officer
Neil J. Eckstein	Vice President, Assistant General Counsel and Assistant Secretary
Matthew J. Johnson	Vice President and Assistant Secretary

The managers of Level 3 are:

James Q. Crowe
R. Douglas Bradbury
Terrence J. Ferguson

Mr. Crowe, Mr. Ferguson, Mr. Frank and Mr. Johnson may be reached at the following address:

Level 3 Communications, LLC
3555 Farnam Street
Omaha, NE 68131
Telephone: (402) 536-3624

Mr. Bradbury, Mr. O'Hara, Mr. Caruso, Mr. Eckstein, and Mr. Jones may be reached at the following address:

Level 3 Communications, LLC
1450 Infinite Drive
Louisville, CO 80027
Telephone: (303) 926-3000

5. Level 3 does not currently have any corporate offices or officers located in Tennessee. Level 3 may open offices in Tennessee in the future. The name, address and telephone number of the Level 3 employee responsible for Tennessee operations is as follows: Andrea Gavalas, 1450 Infinite Drive, Louisville, CO 80027, (tel.) 303-926-3000.

6. Level 3 is managerially and technically qualified to provide resold and facilities-based local and interexchange telecommunications services in Tennessee. Level 3's officers are well qualified to execute its business plan, to provide its proposed telecommunications services and to operate and maintain Level 3's facilities over which such services will be deployed. Level 3's management team has over forty years of experience in the telecommunications industry. Descriptions of the extensive telecommunications and managerial experience of Level 3's key personnel are attached hereto at Exhibit B.

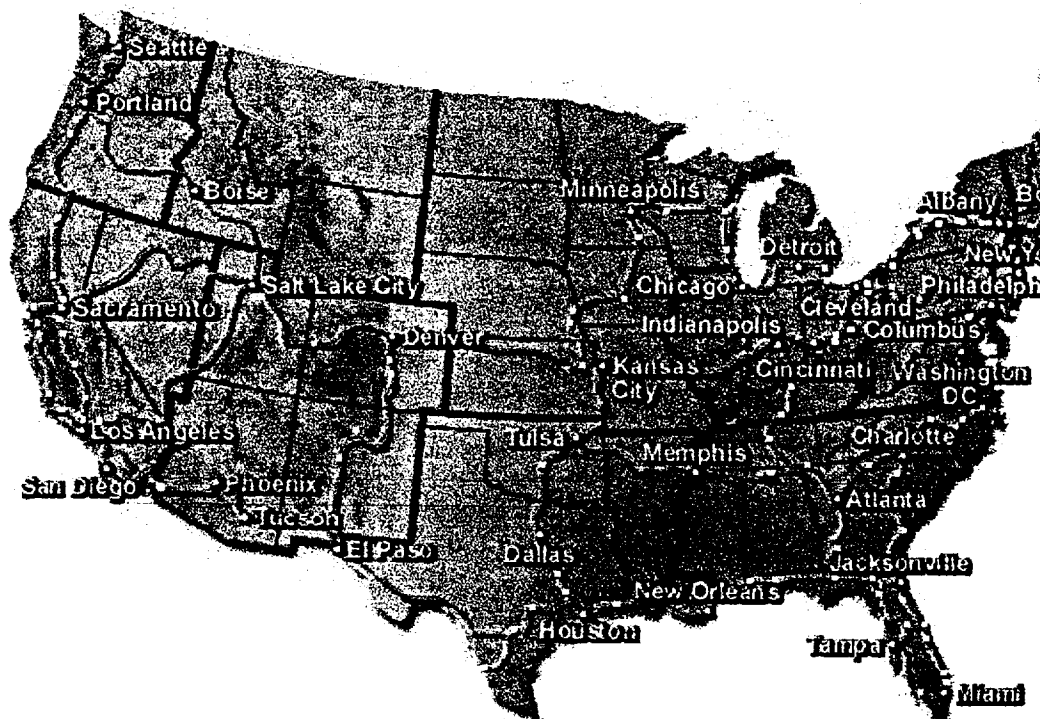
Qwest

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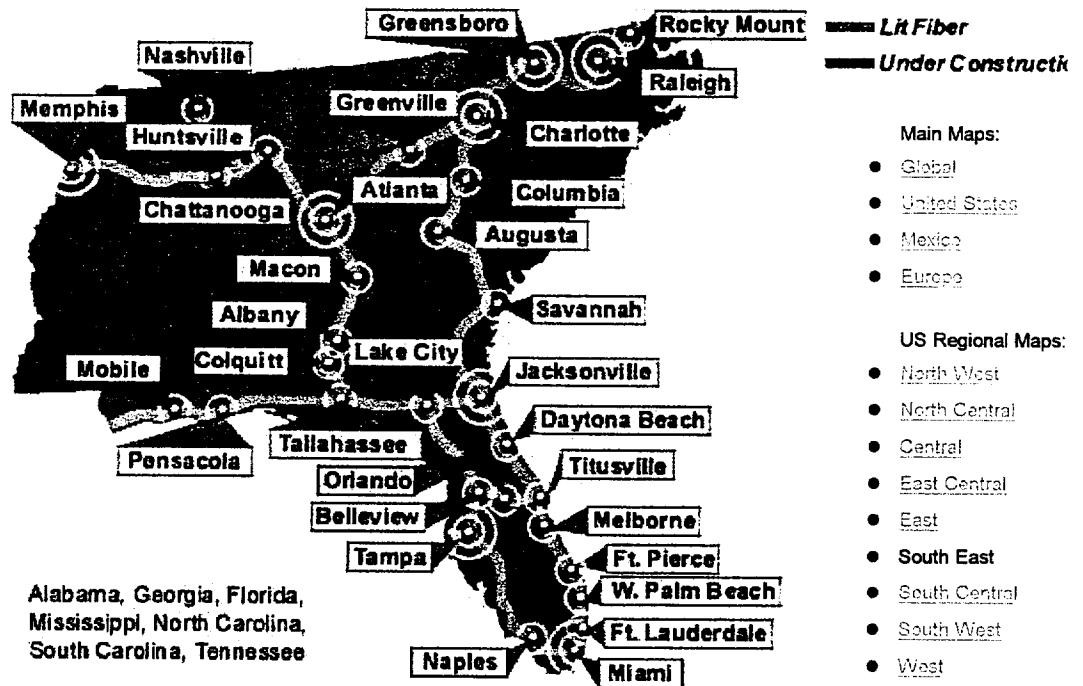
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SECTION 5 - MESSAGE TELECOMMUNICATIONS SERVICE5.2 Rates (continued)c. PROGRAM NAME: Option 1, continued

BILLING: 18 second minimum/6 second increments
Per minute rates will be prorated.

USAGE RATES (continued):

C. Metro Calling Plan Toll Discounts

Metro Calling Plan provides for special pricing for calls between selected cities served by US LEC. All US LEC Option 1 customers will receive Metro Calling Plan discounts.

Metro Calling Plan – City Availability

Memphis Chattanooga
Nashville
Knoxville

N

1.	Minimum Usage:	\$100 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent Discount:	0.00%	10.00%	20.00%
2.	Minimum Usage:	\$500 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent discount	34.00%	36.00%	40.00%

Issued: April 1, 1999

Effective: May 1, 1999

Issued By: Executive Vice President - Administration
Transamerica Square
401 North Tryon Street, Suite 1000
Charlotte, North Carolina 28202

SECTION 5 - MESSAGE TELECOMMUNICATIONS SERVICE**5.2 Rates (continued)****c. PROGRAM NAME: Option 1, continued**

BILLING: 18 second minimum/6 second increments
Per minute rates will be prorated.

USAGE RATES (continued):**C. Metro Calling Plan Toll Discounts (continued):**

3.	Minimum Usage:	\$750 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent Discount:	43.00%	46.00%	47.00%
4.	Minimum Usage:	\$1000 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent discount	46.00%	48.00%	50.00%
5.	Minimum Usage:	\$2000 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent Discount:	65.00%	66.00%	67.00%
6.	Minimum Usage:	\$5000 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent discount	67.00%	69.00%	70.00%

Issued: August 24, 1998

Effective: September 24, 1998

Issued By: Executive Vice President - Administration
Transamerica Square
401 North Tryon Street, Suite 1000
Charlotte, North Carolina 28202

SECTION 5 - MESSAGE TELECOMMUNICATIONS SERVICE**5.2 Rates (continued)****c. PROGRAM NAME: Option 1, continued****BILLING:** 18 second minimum/6 second increments
Per minute rates will be prorated.**USAGE RATES (continued):****C. Metro Calling Plan Toll Discounts (continued):**

7.	Minimum Usage:	\$7500 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent Discount:	69.00%	70.00%	71.00%
8.	Minimum Usage:	\$10000 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent discount	70.00%	71.00%	72.00%

Issued: August 24, 1998

Effective: September 24, 1998

Issued By: Executive Vice President - Administration
Transamerica Square
401 North Tryon Street, Suite 1000
Charlotte, North Carolina 28202

SECTION 5 - MESSAGE TELECOMMUNICATIONS SERVICE**5.2 Rates (continued)****c. PROGRAM NAME: Option 1, continued**

BILLING: 18 second minimum/6 second increments
Per minute rates will be prorated.

USAGE RATES (continued):**D. IntraLATA Toll Calling****1. IntraLATA Calling Bands**

<u>Band 1</u>	<u>Band 2</u>	<u>Band 3</u>
0-10 miles	11-16 miles	17-22 miles
<u>Band 4</u>	<u>Band 5</u>	<u>Band 6</u>
23-30 miles	31-40 miles	41+ miles

2. Standard Plan Rates

Note: Metro = Metro Calling Plan Toll Discounts
(see above Option 1 Section C)

<u>Band 1</u>	<u>Band 2</u>	<u>Band 3</u>
Free	Metro	Metro
<u>Band 4</u>	<u>Band 5</u>	<u>Band 6</u>
Metro	Metro	Metro

Issued: August 24, 1998**Effective:** September 24, 1998

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401 North Tryon Street, Suite 1000
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SECTION 5 - MESSAGE TELECOMMUNICATIONS SERVICE**5.2 Rates (continued)**

- d. **PROGRAM NAME:** Option 2 (Non-Committal Rate)
Option 2 Service is a one-way, dial in-dial out multipoint service allowing customers to originate and terminate calls via US LEC provided local business telephone lines. Option 2 requires no minimum usage and no minimum term.

BILLING: 18 second minimum/6 second increments
Per minute rates will be prorated.

USAGE RATES:

- A. Domestic InterLATA Base Rate Per Minute \$0.25
- B. IntraLATA Toll Calling
1. IntraLATA Calling Bands
- | | | |
|---------------|---------------|---------------|
| <u>Band 1</u> | <u>Band 2</u> | <u>Band 3</u> |
| 0-10 miles | 11-16 miles | 17-22 miles |
| <u>Band 4</u> | <u>Band 5</u> | <u>Band 6</u> |
| 23-30 miles | 31-40 miles | 41+ miles |
2. Standard Plan Rates
- | | | |
|---------------|---------------|---------------|
| <u>Band 1</u> | <u>Band 2</u> | <u>Band 3</u> |
| Free | \$0.25 | \$0.25 |
| <u>Band 4</u> | <u>Band 5</u> | <u>Band 6</u> |
| \$0.25 | \$0.25 | \$0.25 |

Issued: August 24, 1998**Effective:** September 24, 1998

Issued By: Executive Vice President - Administration
Transamerica Square
401 North Tryon Street, Suite 1000
Charlotte, North Carolina 28202

SECTION 6 - 800 SERVICE**6.1 Description**

800 Service is an inbound-only service in which callers located within the State may place toll-free calls to a telephone in the 800/888 area codes assigned to the Customer. 800 Service is available on both a switched and dedicated basis.

6.2 Rates**a. PROGRAM NAME: Switched 800 Service 1/**

N

This toll service is available on the following terms and conditions.

BILLING: 18 second minimum/6 second increments
Per minute rates will be prorated.

USAGE RATES:**(A) Basic Service Plan A:**

Access	Switched
Minimum Usage:	\$100 (Customer's total monthly usage from all services)
Term	1 Year
Rate per minute:	\$0.160

(B) Basic Service Plan B:

Access	Switched
Minimum Usage:	\$200 (Customer's total monthly usage from all services)
Term	1 Year
Rate per minute:	\$0.144

1/ Beginning 9/24/98, this program will no longer be available to new subscribers.

N

Issued: August 24, 1998

Effective: September 24, 1998

Issued By: Executive Vice President - Administration
Transamerica Square
401 North Tryon Street, Suite 1000
Charlotte, North Carolina 28202

SECTION 6 - 800 SERVICE**6.2 Rates (continued)**

- a. **PROGRAM NAME:** Switched 800 Service (continued) 1/
BILLING: 18 second minimum/6 second increments
 Per minute rates will be prorated.
USAGE RATES (continued):

N

(C) Basic Service Plan C:

Access: Switched
 Minimum Usage: \$500 (Customer's total monthly usage from all services)
 Term 1 Year 2 Years 3 Years
 Rate per minute: \$0.142 \$0.138 \$0.134

(D) Basic Service Plan D:

Access: Switched
 Minimum Usage: \$1,000 (Customer's total monthly usage from all services)
 Term 1 Year 2 Years 3 Years
 Rate per minute: \$0.141 \$0.136 \$0.133

(E) Basic Service Plan E:

Access: Switched
 Minimum Usage: \$2,500 (Customer's total monthly usage from all services)
 Term 1 Year 2 Years 3 Years
 Rate per minute: \$0.138 \$0.134 \$0.130

(F) Basic Service Plan F:

Access: Switched
 Minimum Usage: \$10,000 (Customer's total monthly usage from all services)
 Term 1 Year 2 Years 3 Years
 Rate per minute: \$0.134 \$0.126 \$0.122

1/ Beginning 9/24/98, this program will no longer be available to new subscribers.

N

Issued: August 24, 1998

Effective: September 24, 1998

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 Transamerica Square
 401 North Tryon Street, Suite 1000
 Charlotte, North Carolina 28202

SECTION 6 - 800 SERVICE6.2 Rates (cont'd)c. PROGRAM NAME: Option 3 (cont'd)

BILLING: 18 second minimum/6 second increments

USAGE RATES (cont'd):

C. Metro Calling Plan Discounts

Metro Calling Plan provides for special pricing for calls between selected cities served by US LEC. All US LEC Metro Calling Plan customers will receive the following discounts on eligible calls when subscribing to Option 3.

Metro Calling Plan – City Availability

Nashville	Knoxville
Memphis	Chattanooga

1.	Minimum Usage:	\$100 (Customer's total monthly usage from all services)		
	Term:	1 Year	2 Years	3 Years
	Percent Discount:	0.00%	10.00%	20.00%
2.	Minimum Usage:	\$500 (Customer's total monthly usage from all services)		
	Term:	1 Year	2 Years	3 Years
	Percent Discount:	34.00%	36.00%	38.00%
3.	Minimum Usage:	\$750 (Customer's total monthly usage from all services)		
	Term:	1 Year	2 Years	3 Years
	Percent Discount:	40.00%	42.00%	44.00%

Issued: July 9, 1999

Effective: August 9, 1999

Issued By: Executive Vice President - Administration
Transamerica Square
401 North Tryon Street, Suite 1000
Charlotte, North Carolina 28202

SECTION 6 - 800 SERVICE6.2 Rates (cont'd)c. PROGRAM NAME: Option 3 (cont'd)

BILLING: 18 second minimum/6 second increments

USAGE RATES (cont'd):

C. Metro Calling Plan Discounts (cont'd)

4.	Minimum Usage:	\$1000 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent Discount:	44.00%	48.00%	50.00%
5.	Minimum Usage:	\$2000 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent Discount:	48.00%	50.00%	52.00%
6.	Minimum Usage:	\$5000 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent Discount:	50.00%	52.00%	54.00%
7.	Minimum Usage:	\$7500 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent Discount:	52.00%	54.00%	56.00%
8.	Minimum Usage:	\$10000 (Customer's total monthly usage from all services)		
	Term	1 Year	2 Years	3 Years
	Percent Discount:	54.00%	56.00%	58.00%

Issued: July 9, 1999

Effective: August 9, 1999

Issued By: Executive Vice President - Administration
Transamerica Square
401 North Tryon Street, Suite 1000
Charlotte, North Carolina 28202

SECTION 6 - 800 SERVICE**6.2 Rates (cont'd)****d. PROGRAM NAME: Option 4 (Switched Toll Free Service)**

Option 4 Service is an inbound only service in which callers located within the State may place toll-free calls to a telephone in the toll free area codes assigned to the Customer. Option 4 is only available to customers who subscribe to Local Service with US LEC.

BILLING: 18 second minimum/6 second increments

USAGE RATES:

A. Domestic Base Rate Per Minute \$0.25

B. Domestic Toll Free Discounts

1. Minimum Usage: \$100 (Customer's total monthly usage from all services)

Term	1 Year	2 Years	3 Years
Percent Discount	0.00%	20.00%	26.00%

2. Minimum Usage: \$500 (Customer's total monthly usage from all services)

Term	1 Year	2 Years	3 Years
Percent Discount:	20.00%	26.00%	32.00%

3. Minimum Usage: \$750 (Customer's total monthly usage from all services)

Term	1 Year	2 Years	3 Years
Percent Discount:	42.00%	44.00%	46.00%

Issued: July 9, 1999

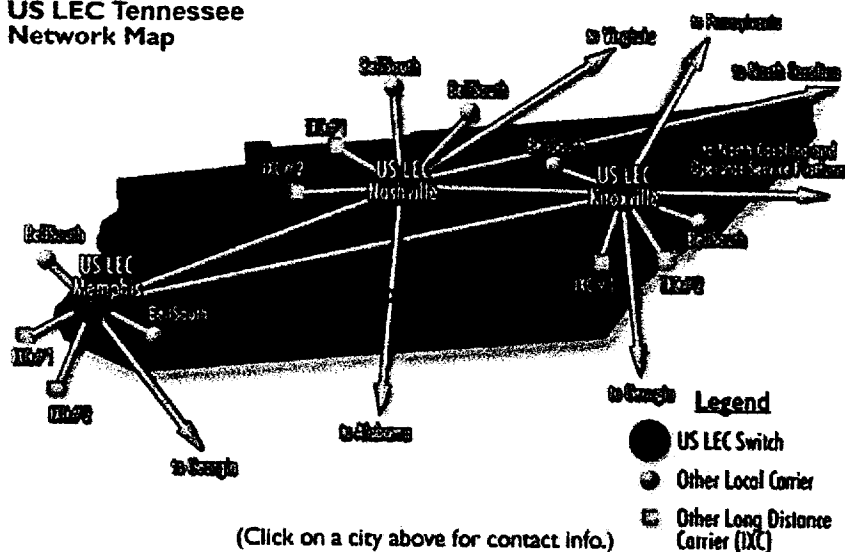
Effective: August 9, 1999

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Network Map

US LEC Tennessee Network Map



- Legend**
- US LEC Switch
 - Other Local Carrier
 - Other Long Distance Carrier (IXC)

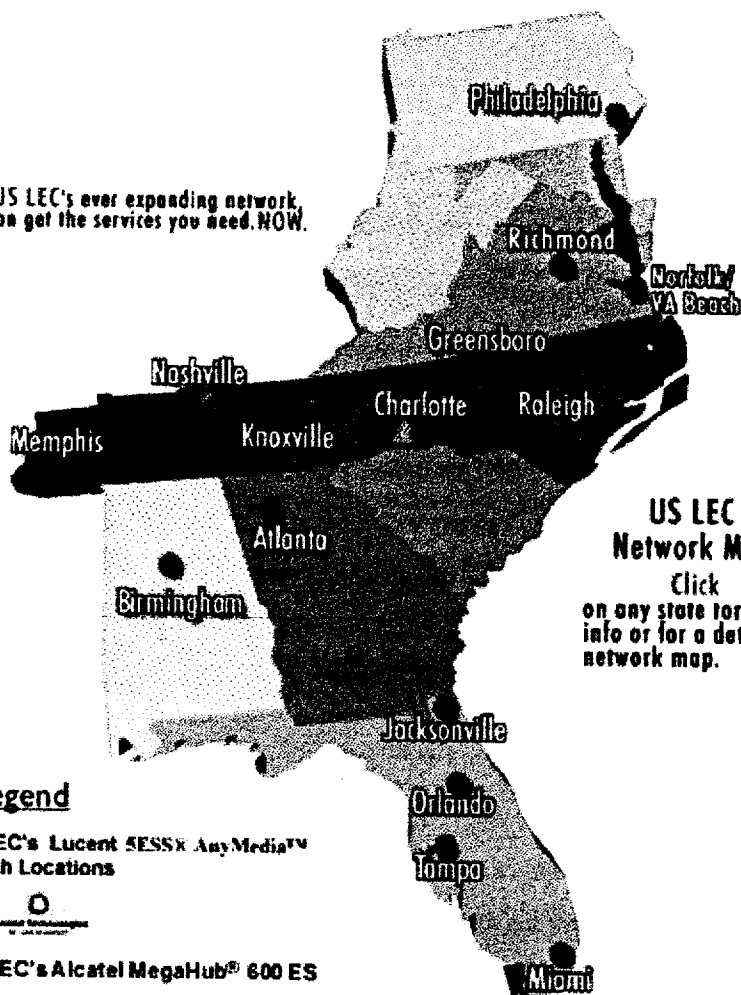
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Network Description

With US LEC's ever expanding network,
you can get the services you need. NOW.



US LEC Network Map

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Legend

- US LEC's Lucent 5ESSx AnyMedia™ Switch Locations
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Network Description

Vendor Links

**BEFORE THE
TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE**

6/3/98
DW

Application of Williams Communications, Inc.)
d/b/a Vyvx, Inc., for a Certificate of Public)
Convenience and Necessity as a Competing) TRA Docket No. 99- 00398
Telecommunications Service Provider)

APPLICATION OF WILLIAMS COMMUNICATIONS, INC.

Pursuant to T.C.A. § 65-4-201 et seq., Williams Communications, Inc., d/b/a Vyvx, Inc. ("Williams" or "Applicant") hereby applies for a certificate of public convenience and necessity as a competing telecommunications service provider to provide telecommunications services throughout the State of Tennessee. Williams seeks authority to offer local exchange, exchange access, and interexchange telecommunications services, on a resold and facilities-based basis throughout the State of Tennessee. Granting Williams' application will promote the public interest because Williams will increase competition in the market and offer innovative and technologically-advanced services to customers in the state. Therefore, Williams respectfully requests that the Tennessee Regulatory Authority ("TRA") grant Williams state-wide authority to operate as a competing telecommunications service provider.

In support of its Application, Williams provides the following information:

I. **Names and Addresses**

The legal name and physical address of the Applicant is:

Williams Communications, Inc. d/b/a Vyvx, Inc.
2600 One Williams Center
Tulsa, Oklahoma 74172
Tel: (918) 573-6000
Fax: (918) 573-0669

Applicant's postal address is:

Williams Communications, Inc.
P. O. Box 22067
Tulsa, Oklahoma 74121

Correspondence or communications pertaining to this Application should be directed to:

Mickey S. Moon
Director of Regulatory Affairs
Williams Communications, Inc.
Williams Resource Center
2 East First Street, Mail Drop RC3-I
Tulsa, Oklahoma 74172
Tel: (918) 573-8771
Fax: (918) 573-0669

with copies to:

Henry Walker
Michael B. Bressman
Boult, Cummings, Conners & Berry, PLC
414 Union Street, Suite 1600
P. O. Box 198062
Nashville, TN 37219
Tel: (615) 244-2582
Fax: (615) 252-6380

and

William H. Gault
Attorney
4100 One Williams Center
Tulsa, Oklahoma 74172

Williams is a corporation organized under the laws of the State of Delaware and is qualified to do business in Tennessee. Williams is a wholly-owned subsidiary of Williams Communications

Group, Inc., which, in turn, is a wholly owned subsidiary of Williams Holdings of Delaware, Inc. The Williams Companies, Inc. ("The Williams Companies"), a publicly traded company, owns 100 percent of Williams Holdings of Delaware, Inc. See attached Exhibit 1 for a copy of Williams' Articles of Incorporation and Exhibit 2 for its Certificate of Authorization to transact business in Tennessee.

II. Qualifications

T.C.A. § 65-4-201 requires an applicant for a certificate of public convenience and necessity to show that it possesses sufficient managerial, financial, and technical abilities to provide the applied-for services. Williams satisfies each of these requirements.

A. Financial Ability

Williams is financially qualified to provide facilities-based and resold local exchange, exchange access, and interexchange services in Tennessee. Williams has operated on an interstate basis since 1990 and has never been in default of any material financial obligation. Attached as Exhibit 3 are audited financial statements for Williams' direct parent company, Williams Communications Group, Inc. ("Williams Communications Group"). Recently, The Williams Companies announced its intention to file an initial public offering for a minority interest in Williams Communications Group which will expand access to capital to support growth in the communications-side of the business. On April 9, Williams Communications Group filed for an initial public offering which is currently under review by the Securities and Exchange Commission. Williams will primarily fund its services through revenues generated by its operations as well as funds received through its direct parent corporation.

B. Managerial Ability

Williams possesses the managerial qualifications to provide facilities-based and resold local exchange, exchange access, and interexchange services in Tennessee. As described in the attached biographical information, Williams' senior management team has extensive management and business experience in the telecommunications, utilities and other industries. See attached Exhibit 4 and a list of Williams' Board of Directors and Officers attached as Exhibit 5.

C. Technical Ability

Williams possesses the technical qualifications to provide facilities-based and resold local exchange, exchange access, and interexchange services in Tennessee. As noted above, Williams' senior management has extensive experience operating companies in the telecommunications and other regulated industries. Moreover, Williams currently has approximately 17,600 route miles in service, 20,000 route miles of fiber in the ground, and plans to complete 32,000 route miles connecting 125 cities by the end of 2000. See attached Exhibit 6.

Williams' twenty-four hour network monitoring center in Tulsa, Oklahoma, provides highly efficient and effective centralized management of its network. Williams regularly provides training to maintain its employees' abilities to respond to the demands of a changing, technologically driven market. In addition, Williams currently provides, and will continue to provide, repair and maintain its facilities in order to ensure that its customers obtain high-quality service. Customers may report service problems to Williams' customer service center 24 hours a day, 7 days a week at (888) 275-9080 and Williams does and will respond promptly.

Williams recently received approval from the TRA to resell interexchange long distance services and operator services in Tennessee. See attached Exhibit 7. In addition, to date,

Williams is authorized to provide intrastate facilities-based and/or resold telecommunications service in 45 states.¹

III. Service Offerings

Williams seeks authority to provide a full-range of local, exchange access, interexchange (including interLATA), and switched and special access telecommunications services throughout the State of Tennessee. Williams intends to offer this broad range of telecommunications services through the use of its own facilities, resold services, and through a combination of these provisioning approaches.

With respect to facilities-based services, Williams, as discussed above, operates one of the nation's largest fiber-optic networks with plans to extensively expand the network in the next two years through fiber-optic construction projects and agreements with other telecommunications carriers.² As part of this expansion, Williams plans to begin construction of extensive fiber-optic facilities in Tennessee in late 1999 and complete construction in 2000. More specifically,

¹ Williams is authorized by the Federal Communications Commission to provide interstate and international telecommunications services. Section 63.07 of the Federal Communications Commission ("FCC") rules authorizes Williams, as a non-dominant carrier, to provide interstate telecommunications services. This section also authorizes Williams to construct, acquire, and operate telecommunications facilities. Three FCC orders authorize Williams to provide certain international telecommunications services: In the Matter of Vyyx, Inc. Application for authority to acquire and operate facilities for provision of International Television and video services between the United States and Canada, File No. I-T-C-95-191, 10 FCC Rcd 5050 (1995); In the Matter of Vyyx, Inc. Application for authority to acquire and operate facilities for provision of International Television and video services, File No. I-T-C-95-245, 10 FCC Rcd 6094 (1995); and Overseas Carrier Section 214 Applications Actions Taken, Report No. I-8235, 12 FCC Rcd 3771 (1997).

² Williams currently operates fiber optic facilities extending between Atlanta and Indianapolis. These facilities are currently restricted to Internet and video transmissions, and to date, Williams has used them solely to provide interstate service.

Williams plans to construct facilities along a route between Atlanta and Nashville, and a route extending between Nashville and Louisville. Williams also plans to construct points of presence ("POPs") along these routes in Chattanooga and Nashville. These facilities will employ the latest in SONET transmission equipment, digital cross-connect systems, and network management capabilities. This network will also feature fiber optic clarity, speed and reliability, cable route diversity and electronic redundancy.

Initially, Williams plans to offer interLATA and intraLATA interexchange services to other telecommunications carriers. These services will include switched voice and other related services that will give Williams' carrier customers the capability of providing account code services, domestic call blocking, directory assistance, operator services, toll free services (e.g., 800, 888, or 887), and alternate billed services such as collect calling, third party number calling, calling cards, and prepaid calling cards to their end users. Although Williams will only market these services to other telecommunications carriers, it will maintain an open network and will therefore not be able to block all 10-XXXXXX or similar access code calls from end users not presubscribed to Williams' carrier customers ("Casual Callers"). As a result, Williams plans to directly bill these customers for such calls. In the future, Williams may offer other advanced interexchange services, including, without limitation, private line, Asynchronous Transfer Mode, Internet Protocol (IP), and frame relay.

Williams also plans to offer basic local exchange services and/or other local exchange services in Tennessee in the future, although it does not have specific plans or products at this time. If Williams offers basic local exchange services directly to consumers, it will directly or

through arrangements with other carriers provide those services required by TRA Rule 1220-4-8-.04(3)(b).

Until Williams' planned facilities in Tennessee are operational, Williams will resell interexchange service purchased from other telecommunications carriers pursuant to its current TRA resale authorization. See attached Exhibit 6. After Williams' planned facilities are operational, it will provide service over its own facilities, the facilities of other telecommunications carriers, or a combination of the foregoing. Williams will, upon certification and before offering facilities-based service, file its initial tariff with the TRA setting forth the rates, charges, and regulations for its services. If Williams offers new services in the future, it will similarly comply with such requirements.

IV. Public Interest and Necessity

The grant of a certificate of public convenience and necessity to Williams to provide facilities-based and resold services within Tennessee will benefit the public because it will increase competition and customer choice for users of interexchange, exchange access, and local exchange services. By increasing competition, Williams' provision of service is expected to improve the price and quality of telephone service in Tennessee. Moreover, Williams' entry into the market will neither prejudice nor disadvantage any class of telephone customers or providers. To the contrary, the presence of another authorized carrier will provide additional consumer choice, promote competition, lower prices, and stimulate development of additional telecommunications services.

The facilities that Williams plans to construct in Tennessee will also benefit the public. As opportunities for economic growth continue to shift toward information services and

technology, the quality of Tennessee's communications infrastructure will determine the state's ability to attract and maintain jobs because a modern telecommunications infrastructure attracts industry and lowers production costs.

V. Miscellaneous

A. Small and Minority-Owned Telecommunications Business Participation Plan

Williams has attached, as Exhibit 7, its small and minority-owned telecommunications business participation plan in compliance with T.C.A. § 65-5-212.

B. Year 2000 Compliance

Williams has attached, as Exhibit 8, its Year 2000 Readiness Disclosure.

C. Rural Telcos and Telephone Cooperatives

Unless otherwise permitted by federal or state law, Williams does not plan to offer local exchange telecommunications services in areas served by any incumbent local exchange telephone company with fewer than 100,000 total access lines, except for those that have voluntarily entered into an agreement with a competing telecommunications service provider or that have applied to provide telecommunications services in an area outside its service area existing as of June 6, 1995. Williams also does not plan to provide service in any area served by a telephone cooperative unless otherwise permitted by applicable federal or state law. Williams reserves the right to expand its services into these areas should any rulings of the TRA or any court or administrative agency allow the provision of service in such areas.

D. Authority in Other States

Williams currently has authority to offer intrastate facilities-based or resold telecommunications services in 45 states. These states include: Alabama, Arizona, Arkansas,

California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Iowa, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, West Virginia, Wisconsin, Wyoming, and Virginia, through Vyvx of Virginia, Inc., a wholly owned subsidiary of Williams, which is authorized to offer telecommunications services in Virginia.

E. Maintenance Information

Tom Armstrong, Williams' Director of Network Operations, is knowledgeable about Williams' operations. Mr. Armstrong will possess ultimate responsibility for monitoring and overseeing the Applicant's maintenance and repair systems in Tennessee. In addition, customers may contact Williams twenty-four hours per day, seven days per week at 1-888-275-9080 for service problems. During normal business hours, customers with billing or similar inquiries can call 1-888-465-9516. Mr. Armstrong can be contacted at:

Williams Communications, Inc.
Director of Network Operations
2 East First Street, RC3-B
Tulsa, Oklahoma 74172
Tel: (918) 573-5042
Fax: (918) 573-6944

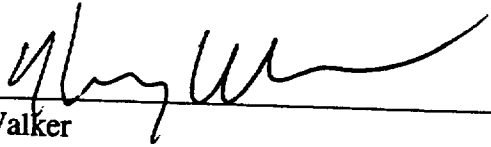
F. Policies, Rules, and Orders

Williams will comply with all applicable statutes, rules and orders concerning the provision of telecommunications services in Tennessee.

CONCLUSION

Williams Communications, Inc., d/b/a Vyvx, Inc. respectfully requests that the TRA (1) grant a certificate of public convenience and necessity as a competing telecommunications service provider to provide local exchange, interexchange, and exchange access telecommunications services throughout Tennessee and (2) grant such other relief it deems necessary and proper.

Respectfully submitted,



Henry Walker

Michael B. Bressman

Boult, Cummings, Conners & Berry, PLC

414 Union Street, Suite 1600

P. O. Box 198062

Nashville, TN 37219

Tel: (615) 244-2582

Counsel for Williams Communications, Inc.

Dated: June 3, 1999

APPLICATION OF TARIFF

This Tariff is available for public inspection during normal business hours at the main office of Williams Communications, Inc., located at Williams Resource Center, 2 East First Street, Tulsa, OK 74172.

This Tariff contains the rates, terms and conditions of service applicable to the furnishing of the within described intrastate interexchange services by Williams Communications, Inc. This Tariff applies to interexchange services offered by Williams Communications, Inc. to the general public, which, for purposes of this Tariff, consist of casual calling customers and other providers of Telecommunications Services or Information Services (Reseller Customers) for resale, and which are subject to regulation by the Commission. These services are provided in conjunction with the Company's interstate telecommunications services originating or terminating within the state. This Tariff does not apply to the within described services which are provided by Williams Communications, Inc.:

- (a) to other providers of Telecommunications Services or Information Services pursuant to any contractual arrangements that have been or are entered into on an Individual Case Basis pursuant to Section 2.1.7;
- (b) pursuant to other Williams Communications, Inc. tariffs unless specifically stated therein;
- (c) to affiliates of the Company; and
- (d) on an interstate or international basis.

Williams Communications, Inc. does not provide service to, and this Tariff is not applicable to, presubscribed residential customers. With the exception of Casual Calling Service, Williams' services as specified herein are applicable to Reseller Customers only.

*Is this company under new rule?
What is their cap?*

What are they?

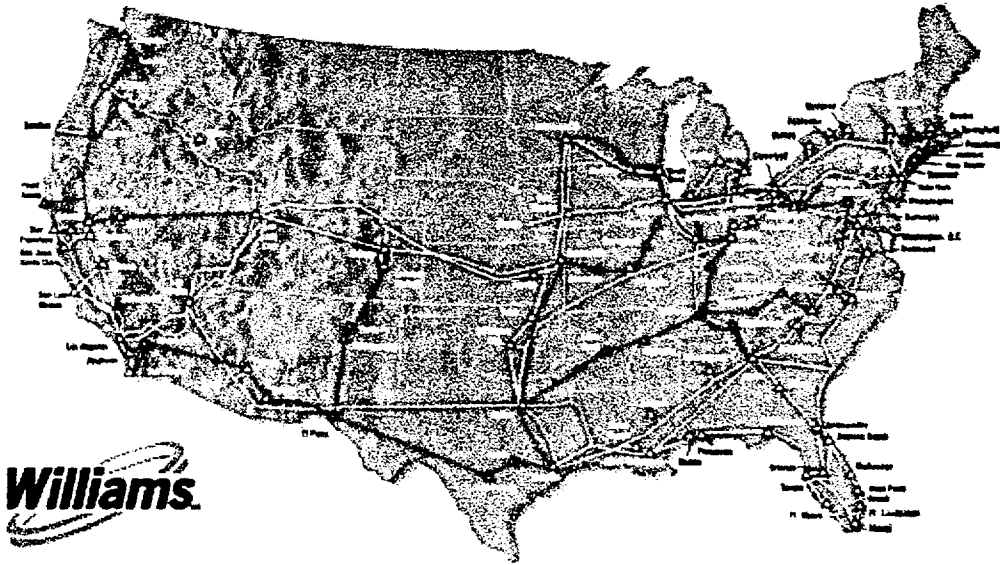
Circumvented Rule:

ISSUED: October 19, 1999

EFFECTIVE: October 19, 1999

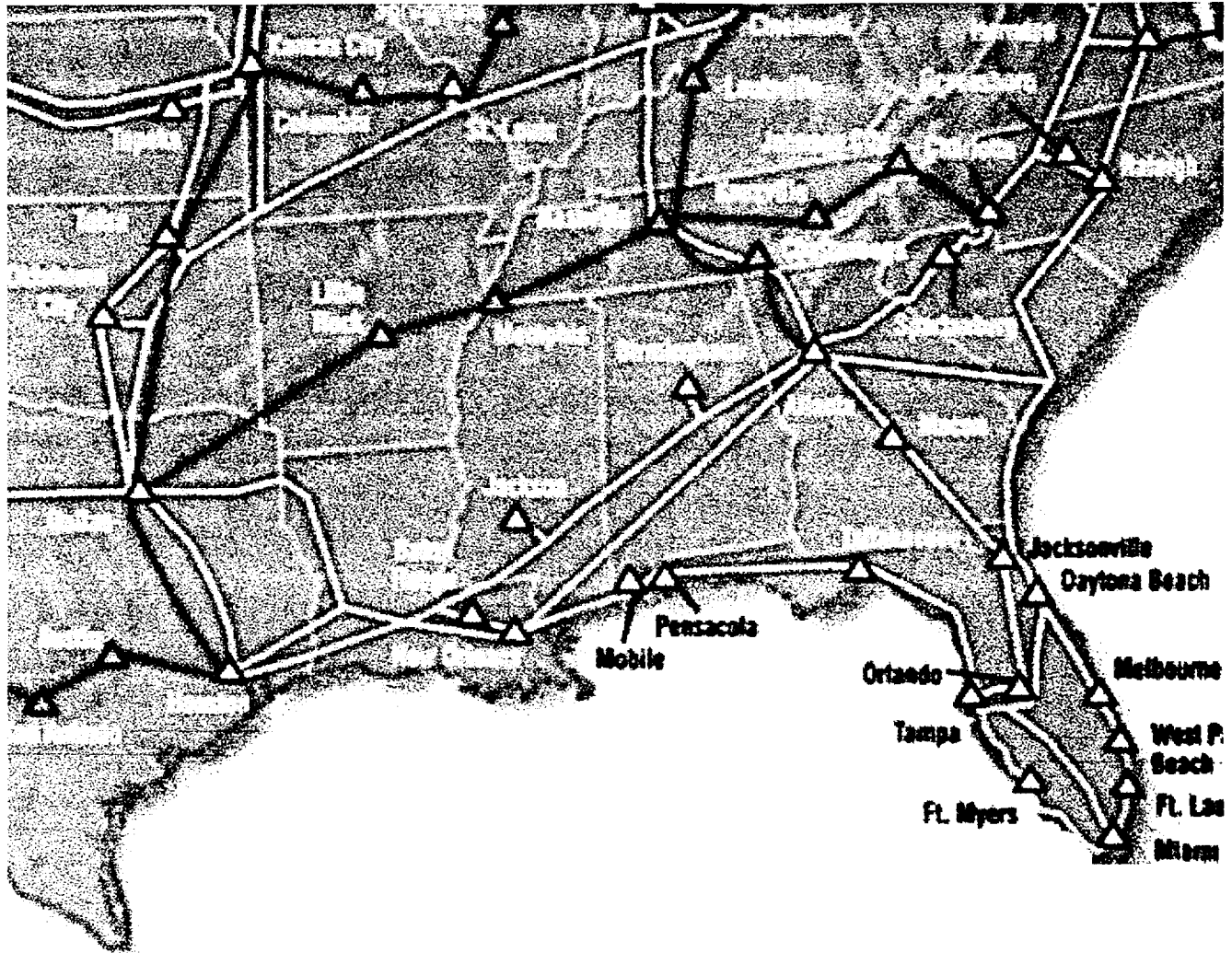
ISSUED BY: Mickey S. Moon, Director of Regulatory Affairs
2800 One Williams Center
Tulsa, Oklahoma 74172
(918) 573-8771

Click Section Of Map To Enlarge










Williams

NETWORK



**BACK TO MAIN MAP
IN SERVICE PLAN**

ATM SWITCH LOCATIONS	VOICE SWITCH LOCATIONS	POPS	NETWORK	CUMULATIVE ROUTE MILES
			 1999	26,000
			 2000	32,000

**APPLICATION FOR CERTIFICATE
TO PROVIDE OPERATOR SERVICES AND/OR
RESELL INTEREXCHANGE
TELECOMMUNICATION SERVICES IN TENNESSEE
[RULE 1220-4-2-.57]**

SECTION A

Part 1: General Information

A. Name of Applicant Cable & Wireless Global Card Services, Inc.

Address 1275 Pennsylvania Avenue City Washington
State DC Zip Code 20004 Phone No. (703) 790-5300

B. Owner, Partners, or Corporate Officer See Exhibit A.

NAME	ADDRESS	CITY	STATE	CODE	ZIP

C. Name and telephone number of Tennessee contact person authorized to respond to Commission inquiries Monday through Friday. **Not applicable.**

Name _____ Tennessee Phone No. _____ Fax No. _____

D. List a toll-free telephone that consumers can call to report service problems and/or request refunds or adjustments. (800) 486-8686

E. Check the type of telecommunication services you plan to provide in Tennessee.
☒ Resell Interexchange long distance services

☐ Operator Services

☐ Other (describe below) _____

F. If providing operator services, list company name, address and contact person for all reseller carriers you serve in Tennessee. Provide the above information on Appendix I.
Not applicable.

G. List the state(s) you are authorized to operate in at this time. **The Applicant is not authorized to provide service in any state but is in the process of obtaining authorization in all 50 states.**

Company ID Number _____

(To be filled out by PSC)

Date Approved _____

Evaluator _____

128138

98-00276

Mail the completed application and check for \$50.00 to: Tennessee Public Service Commission, P.O. Box 3412, Nashville, TN 37219-0412. Should you have any questions, call (615) 741-3939.

DC01/PRU1A/26973.1

Company ID: 128138

Cable & Wireless Global Card Services, Inc.
1275 Pennsylvania Avenue
Washington, DC 20004

BEFORE THE TENNESSEE REGULATORY AUTHORITY
Nashville, TN

March 16, 1999

IN RE: CASE NUMBER: 98-00276

Application for Authority to Provide Operator Services and/or Resell Telecommunications Services in Tennessee Pursuant to Rule 1220-4-2-.57.

---ORDER---

This matter is before the Tennessee Regulatory Authority upon the application of the above-mentioned company for certification as a reseller or telecommunication operator service provider in Tennessee. The TRA considered this application at a Conference held on March 16, 1999 and concluded that the applicant has met all the requirements for certification and should be authorized to provide operator services and/or resell telecommunications services on an intrastate basis.

IT IS THEREFORE ORDERED:

1. That the above-mentioned company is issued a Certificate of Convenience and Necessity as an operator service provider and/or reseller of telecommunications services for state-wide service in Tennessee as specified in its application on file with the Authority.
2. That said company shall comply with all applicable state laws and TRA rules and regulations.
3. That this order shall be retained as proof of certification with this Authority, and may be used to obtain appropriately tariffed service and billing arrangements from Authority authorized telecommunications service providers.

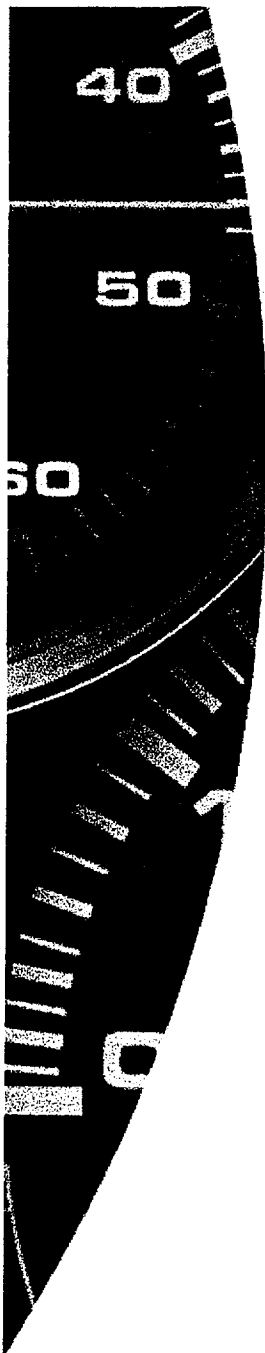
ATTEST:


Executive Secretary


Chairman


Director

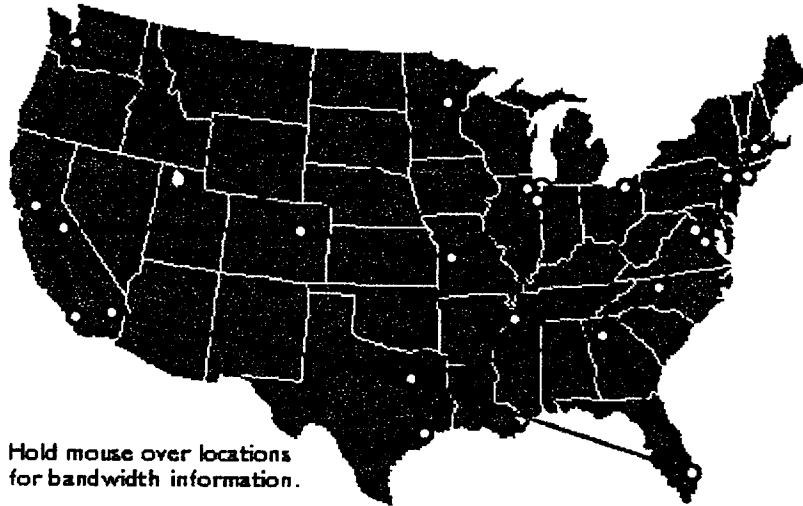

Director



CABLE & WIRELESS

traffic.cwusa.com

PROOF OF OUR NETWORK PERFORMANCE



Hold mouse over locations
for bandwidth information.

Select a starting city and a destination city to see
the current deliverability statistics for that
particular internet connection, then hit "Go".

Select a source:

Atlanta

Select a destination:

San Francisco



[Home](#) | [Internet Services](#) | [Network](#) | [Port Utilization](#) | [Real Time Statistics](#)

TENNESSEE PUBLIC SERVICE COMMISSION

400 JAMES ROBERTSON PARKWAY
NASHVILLE, TENNESSEE 37243-0505

... BISSELL, CHAIRMAN
STEVE HEWLETT, COMMISSIONER
SARA KYLE, COMMISSIONER

PAUL ALLEN, EXECUTIVE DIRECTOR



APPLICATION FOR CERTIFICATE TO PROVIDE OPERATOR SERVICES AND/OR RESELL INTEREXCHANGE TELECOMMUNICATION SERVICES IN TENNESSEE [RULE 1220-4-2-57]

SECTION A

Part 1: General Information

A. Name of Applicant IXC Long Distance, Incorporated
Address 700 San Jacinto Center, 98 San Jacinto Blvd., Austin,
State Texas Zip Code 78701 Phone No. (512) 433-2400

B. Owner, Partners, or Corporate Officer

NAME	ADDRESS	CITY	STATE	ZIP CODE
Meri B. Brazier	700 San Jacinto Center, Austin,	TX	78701	
(Vice President)	98 San Jacinto Blvd			

C. Name and telephone number of Tennessee contact person authorized to respond to Commission inquiries Monday through Friday. Registered agent national office:
CT Corporation System (800) 324-0754 (713) 658-4720
Name Tennessee Phone No. Fax No.

D. List a toll-free telephone number that consumers can call to report service problems and/or request refunds or adjustments. 800-848-8459

E. Check the type of telecommunication services you plan to provide in Tennessee.
☒ Resell Interexchange long distance services
☐ Operator Services
☐ Other (describe below) _____

F. If providing operator services, list company name, address and contact person for all reseller carriers you serve in Tennessee. Provide the above information on Appendix I.

G. Not applicable.
List the state(s) you are authorized to operate in at this time. AZ, AR, CO, DE, FL,
ID, IL, IN, IA, KS, KY, LA, MD, MA, MT, NH, NJ, NY, OH, OR, PA,
SD, TX, UT WA, WY.

(To be filled out by PSC)
Company ID Number 95-3221
Date Approved 115538
Evaluator _____

Mail the completed application and a check for \$50.00 to: Tennessee Public Service Commission, P.O. Box 3412, Nashville, TN 37219-0412. Should you have any questions, call (615) 741-3939.

Company ID: 115481
BroadWing Communications Services Inc.
1122 Capital of Texas Hwy., So.
Austin, TX 78746

BEFORE THE TENNESSEE REGULATORY AUTHORITY
Nashville, TN January 11, 2000

IN RE: CASE NUMBER: 99-00913
IXC Communications Services, Inc. to change its name to BroadWing Communications Services Inc.

—ORDER—

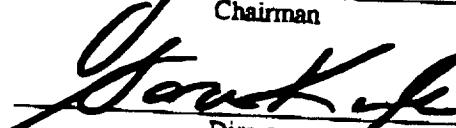
This matter is before the Tennessee Regulatory Authority upon the petition of IXC Communications Services, Inc. to change its company name. The TRA considered this request at their regularly scheduled Conference held on January 11, 2000 and concluded that the applicant has met all the TRA requirements for changing their name.

Pursuant to § T.C.A. 65-4-113,

IT IS THEREFORE ORDERED:

1. That the petition of Frontier Telemanagement Inc. to change its name to Global Crossing Telemanagement is approved.
2. That Global Crossing Telemanagement, Inc. holds a Certificate of Public Convenience and Necessity to provide resold telecommunications services in Tennessee as specified in its application on file with the Authority.
3. That said company shall comply with all applicable TRA rules and regulations.
4. That this order shall be retained as proof of certification with this Authority, and may be used to obtain appropriately tariffed service and billing arrangements from Authority authorized telecommunications service providers.


Chairman


Director


Director

ATTEST:


Executive Secretary



REC'D
REC'D

29 NOV 30 AM 10 05

November 24, 1999
Via Overnight Delivery

210 N. Park Ave.
Winter Park, FL
32789

P.O. Drawer 200
Winter Park, FL
32790-0200

Tel: 407-740-8575
Fax: 407-740-0613
tmi@tminc.com

Commission Secretary EX-100
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37219-0412

EXECUTIVE SECRETARIAT

**Re: BroadWing Communications Services Inc.
formerly known as IXC Communications Services, Inc.**

Dear Sir/Madam:


Enclosed for filing are the original and thirteen (13) copies of replacement Tariff No. 3 filed on behalf of BroadWing Communications Services Inc. formerly known as IXC Communications Services, Inc. This filing completely replaces IXC Communications Services, Inc.'s Tariff No. 2 in its entirety.

This filing reflects a new corporate name. A copy of the Certificate of Authority changing the corporate name is also enclosed along with a \$25.00 filing fee. The Company respectfully requests an effective date of December 29, 1999. Please issued an amended Certificate reflecting the new company name.

Please acknowledge receipt of this filing by date-stamping the extra copy of this cover letter and returning it in the self-addressed, stamped envelope enclosed for this purpose.

Questions regarding this filing may be directed to my attention at (407) 740-8575.

Sincerely,

Sincerely,

Connie Wightman
Consultant to BroadWing

CW/dm

Enclosures

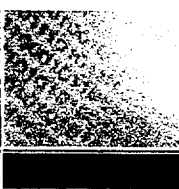
cc: Pam Robinson, BroadWing
File: BroadWing/CSI-TN
TMS: TN19904

ITC Communications
Inc. Inc.

change to:

Broadwing Communication
Soc. Inc

99-00913



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[Network Maps](#)

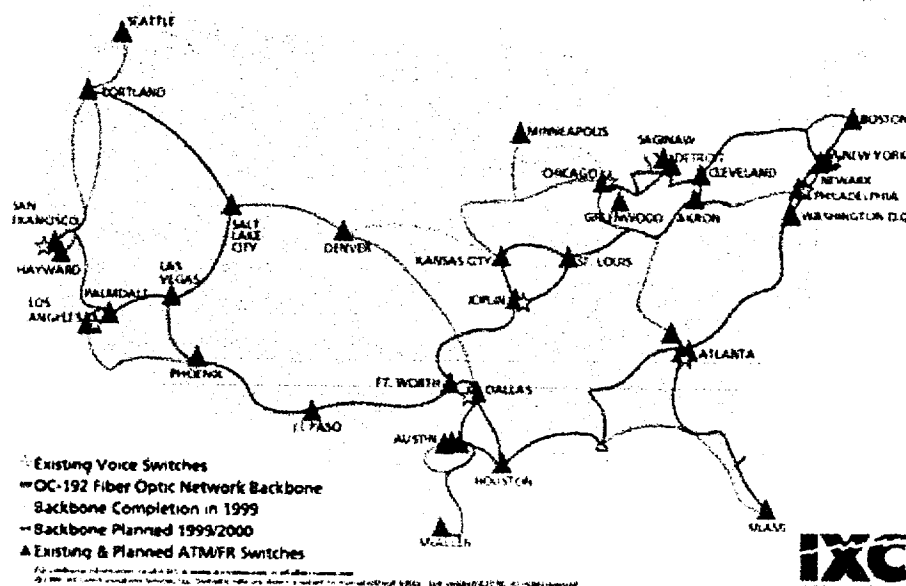
IXC NETWORK

The Network of Opportunity

- ABOUT IXC
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- SALES
- THE NETWORK
- INVESTORS
- NEWS ROOM
- FAQ
- EMPLOYMENT
- Y2K
- CUSTOMER SOLUTIONS

Contact us for more info:
info@ixc-comm.com

© 1999 IXC Communications, Inc.



This Network Map is also available in [Adobe Acrobat format \(PDF\)](#).

Points of Presence

Abilene	Denver	Los Angeles	Richmond
Akron	Detroit	Louisville	Sacramento
Amarillo	Durand	Lubbock	Saginaw
Ann Arbor	El Paso	McAllen	San Angelo
Atlanta	Flint	Miami	San Antonio
Austin	Fresno	Midland, MI	San Diego
Bakersfield	Ft. Worth	Midland, TX	San Francisco
Baltimore	Grand Rapids	Milwaukee	Seattle
Battle Creek	Harlingen	Minneapolis	South Bend
Bay City	Hartford	Nashville	St. Louis
Birmingham	Houston	New Orleans	Stockton
Boston	Hudson	Newark	Sunnyvale
Chicago	Indianapolis	Norfolk	Tallahassee
Cincinnati	Jackson	Oklahoma City	Tampa
Cleveland	Joplin	Palmdale	Toledo
Colorado Springs	Kalamazoo	Philadelphia	Tucson
Columbus	Kansas City	Pittsburgh	Tulsa
Corpus Christi	Lansing		Waco

Dallas
Dayton

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Longview

Phoenix
Pontiac

Washington DC

and many more ...
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[Back to Network](#)

Applications are key market drivers

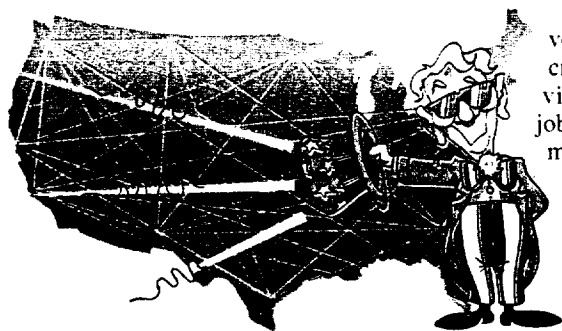
According to the Telecommunications Industry Association (TIA) and its subsidiary, the MultiMedia Telecommunications Association (MMTA), in its jointly produced market review and forecast for 2000, the overall U.S. telecom market (equipment and services) grew by more than 11.4% in 1999, generating revenues of \$517.6 billion. The fastest-growing equipment categories last year include computer-telephony integration (CTI), hardware and software, groupware, videoconferencing, and network equipment/facilities. Enterprise spending on professional and technical services in support of voice and data communications rose 18.1% in 1999, indicating that business customers want high-end applications without being their own integrators and suggesting that applications are the market drivers. Solve the end-user's business problems, and the technology sales will follow.

nanoBITS

Wi-LAN, Inc., a Canadian innovator in the wireless data/Internet communications industry, formed a strategic partnership with **Amplify.net**, a Silicon Valley startup specializing in broadband service-enabling solutions. Wi-LAN will provide Amplify.net's bandwidth solutions for Wi-LAN's wireless data products. Two other corporate investors, **3Com Corp.** and **Kingston Technology Corp.**, have taken a minority equity position in Amplify.net. . . . **Telstra** and **STAR Telecom** formed a network alliance which will accelerate Telstra's expansion in the U.S. STAR Telecom will provide Telstra with bandwidth capacity and network control services from its data center in Los Angeles, Calif. . . . Italian fixed telecom carrier, **Infostrada**, agreed to install **ADC's** network performance management technology, **Mettrica/NPR**, for wireline management to guarantee quality and consistency of service as it manages mas-

sive growth in traffic and rolls out new capacity. In a year's time, Infostrada's business and private fixed-line subscriber base increased 136% to over two million. It also holds 28% of the Italian market for Internet access. . . . **VoiceStream Wireless Corp.**, a GSM provider in the U.S., announced that it will implement **Amdocs'** Ensemble end-to-end customer care and billing system to support all of its subscribers. . . . **Xpedior, Inc.**, provider of e-business solutions to Global 2000 companies and emerging digital business, and **Delano Technology Corp.**, provider of interaction-based e-business solutions for the enterprise, have signed an agreement that will result in new integrated solutions for companies seeking e-business technologies that leverage e-mail and the Web to support on-line customers, suppliers, partners, and employees.

Iowa voters' vision of high-tech's future



Seventy-eight percent of Iowa voters feel that it is important to create a favorable regulatory environment to attract high-tech jobs—which, on average, pay 77% more than other jobs—and that the government should not have a role in designing computer software (67%). Those results are part of a statewide survey conducted by Mason-Dixon Polling & Research, Inc. for Americans for Technology Leader-

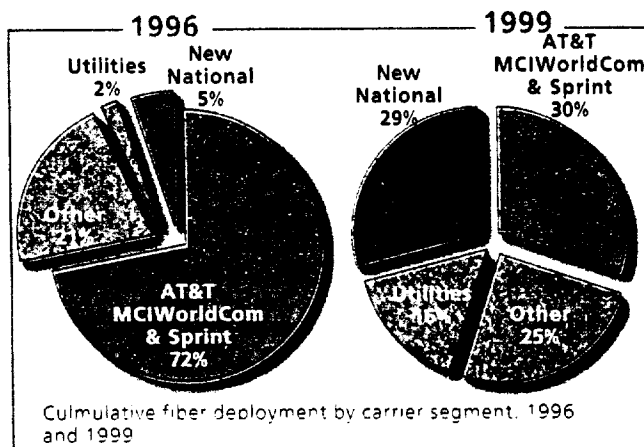
ship. This broad-based coalition of technology professionals, consumers, and organizations is dedicated to limiting government regulation of technology and fostering competitive market solutions to public policy issues affecting the technology industry.

A highlight of the survey is that 35% would be "less likely" to vote for a candidate for public office who supported increased government regulation of the tech industry, as opposed to 13% who would be "more likely." "We created ATL to give a voice to Americans who share the view that the future of technology should be determined by consumers, programmers, and engineers, rather than lawyers and government agencies," ATL president Jonathan Zuck adds. "The results of this survey clearly show that most Iowa voters feel strongly about government's role in technology and want political leaders to listen to their concerns."

Long-distance fiber-optic networks expansion soars

Fueled by regulatory changes, stronger competition, and exploding bandwidth demand, long-distance carriers in North America will deploy 11 million km of fiber this year—more than four times their annual deployment in 1997, according to KMI Corp.'s latest study, "Fiber-Optic Networks of Long-Distance Carriers in North America." KMI Corp. specializes in fiber-optics market research. In the U.S., AT&T, MCI, Sprint, and WorldCom accounted for nearly three-fourths of cumulative fiber deployment in 1996. By 1999, their share of U.S. fiber assets slipped to just 30%, while new national carriers and utilities together accounted for 45% of U.S. long-haul fiber. According to the report, most major carriers with plans for large national networks (Level 3, Qwest, Williams) will have completed their long-haul routes by the end of this year.

— Compiled and edited by Carren Bersch



Telecom Brokers Open For Business

Web sites try to bring service providers and customers together to do some deals

By Denise Culver

Special To Interactive Week

A new group of Web start-ups is hoping to cash in on what looks like a promising trend in selling telecom services: operating as a clearinghouse for prices and service offerings from different providers.

Over the past few months, several new companies have launched Web sites that allow consumers or businesses to do comparison shopping for telecom services. These companies, including eSpoke.com, Simplexity.com and Demandline.com, are entering a developing market already populated by more than a handful of brokers specializing in telecom services or equipment.

Many of these brokers are targeting small-business customers, which

tend to be the hardest and most expensive new customers for service providers to reach.

"Small-business customers are elusive and hard to find, and they require a high customer-acquisition cost because they tend to be skeptical," says Jeanne Schaaf, a senior analyst at Forrester Research.

In the past, service providers have relied on direct mail and cold calling to drum up small-business customers. But more are now signing on with Web-based broker sites that enable prospective customers to quickly compare pricing plans and purchase services online.

"Although the market is still very much in its infancy, it's growing quickly and will be a very visible new business model within the next 18 months," Schaaf says.

Getting crowded

There are now more than a dozen Web sites on which customers can price and purchase everything from telephone headsets to long-distance to Digital Subscriber Line (DSL) service. Although the basic business plan for

these businesses is essentially the same — to bring customers and telecom providers together, and get some sort of commission or fee from the process — Web brokers are taking different approaches to making their plan work.

On the big-business end of the

market are sites such as Telco Exchange (www.telcoexchange.com), which prices and processes orders for data and voice services anywhere in the country.

To use the service, customers enter their area codes and exchanges. >>

At a Glance

Cheaper by the (almost) dozen

The following 10 Web sites now offer telecom customers some form

- > www.decide.com — Comparing and purchasing telecom services, such as wireless, long-distance and prepaid calling cards
- > www.demandline.com — Pools the buying power of small businesses and uses a reverse auction to get corporate rates from nationally branded providers of core business services
- > www.espoke.com — Comparing telecommunications services from more than 3,000 service providers to find the best service plans available for different types of callers
- > www.hellodirect.com — Online trading for telecommunications products, such as headsets
- > www.pkcomm.com — Comparing long-distance rates for a variety of calling subsets, such as college student, trucker, church organization or small business

The next
generation DSLAM
isn't a DSLAM.
It's Avidia.

20TH STORY of Level 1 printed in FULL format.

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TechWeb News

February 8, 2000

LENGTH: 530 words

HEADLINE: Telecom Nirvana

BYLINE: Mary Mosquera, TechWeb

BODY:

WASHINGTON, D.C. -- Americans have more advanced telecommunications services, provider choices, and lower prices than ever before -- thanks to market-opening legislation that is now four years old, the nation's top communications regulator said Tuesd

The biggest challenge is still bringing more competition to the \$100 billion local telephone industry, Federal Communication Commission Chairman William Kennard told reporters in observing changes since passage of the 1996 Telecommunications Act.

"Because of the act, Americans are using telecommunications services in their daily lives now more than ever. This is truly the beginning of a new era in which high-speed, broadband access will be as ubiquitous as the dial tone is today," Kennard said.

Other countries are taking notes on the American experience, as telecommunications deregulation spreads throughout the world. "The whole world is catching up," Kennard said, following meetings in Europe with regulators. "Because competition in the United States is delivering more telecommunications services at lower prices, and creating unprecedented investment and job growth in every sector of the communications industry -- in wireless, wireline, local and long distance, video, and of course, the Internet," he said.

Wireless competition is exploding, with more than 10 percent of all U.S. voice traffic in 1999, the FCC chairman said. The average wireless bill has dropped 40 percent since 1994, while subscribers have surged four-fold to 80 million. And 75 percent of those users have at least five wireless carriers from which to choose.

Local phone competition is encouraging. "Local competition is where long-distance competition was 20 years ago, but the local market will reach the same competitive level as today's long-distance market much more quickly," Kennard said. The number of new competitive local phone companies doubled over the past year to 300. And 130,000 customers are getting telephone service from their cable companies.

The FCC has refrained from regulating broadband over cable and has given regional phone carriers some regulatory relief in rolling out digital subscriber lines. Kennard said he is depending on competition between cable and telephone to hasten deployment of broadband. The average Internet user spends 25 hours a year waiting for sites to download data, he said. "Clearly, the 1996 act made for growth of the Internet today," he said.

The FCC will pump more airwaves into the market, beginning with an auction this spring, to accommodate accelerating wireless advances for voice and data.

The next wave will be interactive television, Kennard said. It will change the economic models for the broadcasting and cable television industries, becoming Internet companies, as well as digital video providers. Consumers are not clamoring for it yet. But just as with the growth of the Internet, consumers can get content when they want it "Once you have broadband streaming over these pipes, lots of content, music, and videos, people are going to want it when they want it. It's the natural evolution of this technology and this marketplace," Kennard said.

LANGUAGE: ENGLISH

LOAD-DATE: February 8, 2000

Copyright 2000 Warren Publishing, Inc.
WASHINGTON TELECOM NEWSWIRE

February 8, 2000, Tuesday

SECTION: TODAY'S NEWS

LENGTH: 350 words

HEADLINE: KENNARD SEES COMPETITION, INVESTMENT IN ALL TELECOM SEGMENTS

BODY:

FCC Chairman Kennard celebrated the 4th anniversary of the Telecom Act today by declaring robust competition in nearly all segments of the telecom industry, evident from increased investment and lower rates. In a National Press Club speech, he said the new FCC report shows wireless competition has "exploded," long distance competition continues to grow, with rates dropping, and local competition is moving forward, although most residential customers still don't have a choice of carriers. Competition in local markets remains "our biggest challenge," he said. "Some predict that by 2005, nearly 50% of all American households" will have the option of getting phone service from a cable company, which would be "a direct benefit of the 1996 Act," Kennard said. Kennard's upbeat attitude was challenged by some in the audience, especially ILEC representatives who said the FCC's thrust has been to help new entrants while tying the hands of incumbents, particularly in the provision of broadband services to homes. USTA Pres. Roy Neel said after the speech that the FCC actually is "denying consumers choice" by continuing to regulate ILECs heavily while making it easy for AT&T to provide local broadband service through cable without the same access regulation. The Commission is "giving away the farm

AT&T while maintaining a stranglehold on the local telephone companies," he said. The solution is to eliminate regulations such as a separate subsidiary requirement that are imposed on advanced networks offered by telcos, he said. A FCC official later questioned Neel's comments, saying the agency has taken steps to ease ILECs' offering of advanced services, most significantly by eliminating unbundling requirements for such services, meaning ILECs don't have to share them with competitors. Asked by a member of the audience how the FCC "justifies a policy of hands-off cable versus hands-on local telephone companies," Kennard said he has "made it clear that anyone who wants to do advanced services will do so without regulation or with lessened regulation." (WTN 0137-00)

LANGUAGE: ENGLISH

LOAD-DATE: February 9, 2000



A

bout 20 miles northwest of downtown Denver, past the first few massive construction projects on Highway 36, sits a cluster of five buildings in various stages of creation where Level 3 Communications is staging its revolution.

Last year at this time, the site—seemingly light years away from the Denver Technological Center south of the city where most competitive carriers reside—was not much more than a large field with a spectacular view of the Rockies, adjacent to another large field that was soon to become a resort golf club. Among some local telecom vendor sales reps, the site simply was known as the “mud pit.”

A year later, the golf club is complete, Level 3 already is eyeing nearby fields to house its burgeoning staff, and company execs Kevin O'Hara and Ike Elliott have just overseen the launch of the company's first wholesale voice product. Such is life for a company that slightly more than two years ago existed as an idea but today is reshaping and exploding the core beliefs that have held the telecom field together for a century.

At the center of the new tenet is a reliance on IP technology and a distaste for most, though certainly not all, things circuit-switched. Under the new soft-switch architecture, core switching functions no longer are handled in a single unit but instead are parceled out to multiple boxes based on their specific job. The effect is a pure IP network, but one that interoperates with the existing public network.

“The service interfaces with traditional circuit switches by making our IP network one big tandem switch, even though we're not using any circuit-switching technology,” says Elliott, senior director of voice and access network engineering.

continued on page 34

Level 3's revolutionary network design
is reshaping an entire industry

VINCE VITTORE

THE CENTER

Two years ago, such a statement would have bought Elliott a one-way ticket to public network oblivion. Today, it is almost a mantra for the revolution that is forcing traditional circuit-switched vendors to buy any company with IP expertise, rearranging the priorities of virtually every carrier and ultimately leading to an array of new services.

Fiber to spare

Directly related to this new technical model is the reality that everything carriers do must be based on the new economics of a competitive telecom industry where

"Many other carriers are building into their economic models fixed fiber costs," O'Hara says. "We think that is wrong because fiber itself is improving, and the cost is dropping. Everybody is in a variable cost game. You're penalized for not putting in fiber."

Putting glass in the ground with a vengeance is exactly what the company has been doing. Instead of building out a network of two or three strands across the country the way most backbone providers do, Level 3 is constructing a network with 12 strands of fiber—six for its own use and six for leasing to other carriers—and the company uses only one of the 10 to 12 conduits it's burying, leaving plenty of room for expansion (Figure 1).

Moreover, the company isn't marrying itself to any particular type of fiber, generally using the latest fiber regardless of previous generations already in the ground. "Each generation of glass gives you another opportunity to lower your unit cost," O'Hara says. Extrapolating the improvements up to the most recent generation of fiber, Level 3 has an 80% cost advantage over carriers that put in single-mode fiber five years ago. Table 1 shows Level 3's network construction schedule for the U.S.

"The dynamic of pushing costs down is foreign to incumbent carriers," O'Hara adds.

Protocol proctor

Nowhere does Level 3 differentiate itself more from incumbents than in its network architecture, where the decentralization of switching functions and packetization of voice at the edge are reshaping the industry. On the network edge, the company takes analog voice and converts it into packets as quickly as possible, using a variety of protocols. Indeed, if Level 3 has had any immediate impact on the public

network market, it's in protocols.

Not only has the company shepherded the development of key protocols such as H.323—taking it from its early stages as a protocol designed for video communications over a LAN to a key ingredient in the embryonic stage of IP telephony—but Level 3 has served as almost a de facto driver of higher-level protocols. In looking for evidence of such leadership, one only need turn to the Softswitch Consortium, of which Elliott was a key founder and now serves as chairman. The consortium, which many vendors credit with legitimizing the Level 3 architecture vision, is designed to promote compatibility and interoperability among IP voice network elements, specifically focusing on five protocols (see sidebar on page 38). The group, which now counts 86 members,

continued on page 38

FIGURE 1

NETWORK BUILDOUT



customers can walk away at any given moment. Translated into Level 3's day-to-day operations, it means creating a worldwide network for a lot less money than circuit-based carriers.

"The objective is to build the lowest unit cost," says O'Hara, Level 3's executive vice president and chief operating officer. "Everything we do is an economic decision." In the core of the network, that means putting in softswitches for 40% to 45% of the cost of a circuit switch.

For incumbents, that fact alone is a wake-up call. But O'Hara says Level 3 isn't basing its model solely on cheaper cores. Level 3's economic model works on two basic assumptions: The unit costs for telecom are dropping every year, and the opportunity for price flexibility on traditionally fixed costs, such as fiber, are high.

FIGURE 1
LEVEL 3 COMMUNICATIONS: ACHIEVEMENTS AND GOALS

Metric	1998		1999				2000		2001
	3Q actual	4Q actual	1Q actual	2Q actual	3Q actual	4Q estimated	first half estimated	second half estimated	1Q estimated
Markets in service	10	17	17	21	26	27	35	49	56
Markets with fiber networks	0	0	7	11	17	20	23	26	26
Intercity rights-of-way miles	10,500	14,400	15,200	15,920	16,000	16,000	16,000	16,000	16,000
Intercity route miles under construction and completed	175	1234	4054	9270	13,313	14,000	15,000	16,000	16,000
Intercity route miles completed	0	410	1355	2495	5954	8000	12,000	15,000	16,000

Last updated: October 1999

Source: Level 3

also serves as a think tank for advanced application development.

"We saw the group as a real win-win in both forming and driving it," Elliott says. "We had such success with the [IP device control] forum [that] we wanted to continue that—especially focusing higher in the stack. We tend to adopt protocols that have already been developed, but as is the case with

most specs, you need to take it one step beyond."

Still, the group remains in the organizational stage and has much work to do, he adds. "We need to get to the point where we settle on a simple set of protocols for those access networks. We haven't achieved that level of interoperability yet."

By setting an objective of interoperability through a

continued on page 41

More letters for the alphabet soup

If there's one thing the telephone world doesn't need, it's more acronyms. But for Level 3 Communications, it's almost a precept to reality: many key protocols had to be developed, adding even more names and acronyms to the lexicon.

While not joined in any formal relationship, the Softswitch Consortium has been heavily influenced by Level 3's development. "The way Level 3 looks at all these protocols is that we don't choose winners," says Ika Elliott, senior director of voice and access network engineering for Level 3. "We try to get as much traffic on the network so we try to hit all the major protocols."

The group currently is working on five protocols:

H.323. Though Level 3 is not using it within the network, H.323 is the cornerstone technology for the transmission of voice-over-packet networks, specifying the components, protocols and procedures. In the IP telephony environment, H.323 is used in a variety of devices, including gateways to convert and compress analog voice into packets.

Session initiation protocol (SIP). Often mistakenly identified as a direct competitor of H.323, SIP is a protocol used between end systems and proxy servers. Among the services it enables are call forwarding, calling number delivery, personal mobility (the ability to reach a called party under a single, location-independent address even when the user changes terminals), terminal-type negotiation and selection, terminal capability negotiation, authentication and blind and supervised call transfer. In Level 3's architecture, SIP is used as a protocol between soft switches.

Real-time transfer protocol (RTP). RTP, according to the

Softswitch Consortium, "is primarily designed to satisfy the needs of multiparticipant multimedia conferences." In more general terms, the protocol provides end-to-end delivery services for data with real-time characteristics, such as interactive audio and video. Those services include payload type identification, sequence numbering, time stamping and delivery monitoring. RTP also allows for data to be shipped to multiple destinations using multicasting technology. It does not guarantee quality of service, but it allows a receiver to reconstruct the sender's packet sequence.

SGCP/IPDC/MGCP. Among the most important in the Level 3 scheme, this group of protocols, which has evolved into media gateway control protocol (MGCP), provides call control architecture similar to—though not exactly like—SS7 protocol functions in the circuit-switched world. Though MGCP is well into development, Level 3 initially has used IPDC. "The MGCP is something that we're doing a lot more interoperability testing with through the Softswitch Consortium," Elliott says.

Real-time streaming protocol (RTSP). RTSP acts as an application-level protocol for controlling the delivery of data with real-time properties such as voice. RTSP acts as a "network remote control" for multimedia servers. According to the consortium, "RTSP establishes and controls either a single or several time-synchronized streams of continuous media, such as audio and video. It does not typically deliver the continuous streams itself, although interleaving of the continuous media stream with the control stream is possible."

—Vince Vittore

PROFILE



broad industry group, carriers should have a greater selection of vendors, further driving costs down. In fact, Elliott admits there was some self-interest involved in getting the group moving. "Certainly the Softswitch Consortium

"There are some time-to-market barriers. We're going to see an explosion of innovation for Internet-enabled voice applications."

— Ike Elliott, Level 3

mission, which is to enable Internet innovation, is something that will benefit Level 3. We like to have a greater selection of equipment," he says.

Conversely, the early involvement of a carrier with the financial backing of Level 3 spurred many large traditional telecom vendors to get involved. Lucent Technologies, which signed a four-year contract with Level 3 last June, already had the basics of a softswitch in development but pushed it onto the fast track because of the carrier.

"Clearly, I think the softswitch would have evolved, but my experience has been when a customer like Level 3 wants to engage early, you take the challenge," says Lance Boxer, president of Lucent's communications software group. Previously, Boxer worked closely with Elliott and some of the other top Level 3 technical staff while at MCI (before it united with WorldCom). "It's much harder to fund projects with no specific customer. The product

would have evolved, but clearly the early product was crafted around the needs of Level 3."

In fact, Boxer gives specific credit to Level 3 Chairman and CEO James Crowe for forcing traditional

continued on page 43

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PROFILE



“We’re not rolling out a voice-over-IP product just to have one. It’s to have a product that is indistinguishable from the public network.”

— Kevin O’Hara, Level 3

was very specific. Ike [Elliott] and Jim and a lot of others had the audacity to challenge the industry. It’s a little bit problematic for us, but on the other hand, that’s the way the world is.”

We’ve got it licked

Ironically, with all the revolutionary thinking and network scheming coming out of Denver’s suburbs, one of the biggest initial objectives for Level 3 is to look exactly like existing public network operators, albeit using its own IP backbone. And until last month, when the company rolled out its first IP voice product, Level 3 looked more like a large Web-hosting company. Its (3)Voice service initially is targeted at resellers that want a public network service at IP-type prices.

“We’re not rolling out a voice-over-IP product just to have one. It’s to have a product that is indistinguishable from the public network,” O’Hara says.

Getting to that public network par point has meant acting differently, even from its IP voice carrier brethren, many of which have approached the market with dirt-cheap pricing and questionable quality of service. It means only sending voice

continued on page 45

telecom vendors to rethink the way they do business. But the transition was not always easy, Boxer adds.

“Jim pushed us very hard to think very different,” he says. “The first thing he did was push us with different objectives. Most customers demand things in broad terms. Jim

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over its own backbone and not using any compression, which in turn requires more backbone bandwidth.

"The quality of service problem is something that we've licked," Elliott says. "Only going over our backbone is a very important distinction. We don't use any compression on our network for this service because compression is a source for quality degradation."

Not everything is perfect, particu-



larly when trying to control quality over access networks it doesn't own, he adds. "The big issue is access networks and how to maintain quality over those access networks."

In certain cases, such as markets where the company doesn't have a local access point, Level 3 will hand off calls to the public network. Still, the company has made enough of an impact in the quality issue to make it virtually disappear in customers' minds. "The neat thing about it is that we've finally made voice over IP a purely economic decision for the customer," Elliott added, noting that the company has been using the service with employees since April 1999.

Just when—or even if—Level 3 will launch a retail-oriented voice product is unknown. Like the technology behind the company, much of the strategy has changed since its founding in late 1997.

In those heady early days, armed with \$3 billion in financing, the company appeared intent on competing with long-distance and local carriers. But that changed during the course of the first 18 months as Web-centric customers flooded the market looking for hosting services. And with the introduction of voice, Level 3 could be positioned to provide a variety of services across mul-

multiple markets, though it's trying not to be everything to every customer.

"We want to get very good in one horizontal layer," O'Hara says.

One area the company mostly will play to is the application service provider (ASP) market. In fact, the addition of voice likely will prevent the company from competing as an ASP itself. "Increasingly, customers want to buy bundles but don't want to provide everything," O'Hara says.

"ASPs want to do a few things only but want to do them well. We think voice itself is an application. How you enhance voice is a good application for ASPs."

Still, the company may dabble in some of those applications.

"There aren't really tech barriers," Elliott says. "There are some time-to-market bar-

riers. We're going to see an explosion of innovation for Internet-enabled voice applications."

Pinning Elliott down on specific applications is virtually impossible, though he admits to interest in unified messaging.

"I see [a] real opportunity for apps in the business market that save people real time and make them more productive," he says. "Certainly unified messaging is a piece of that. Certainly speed dialing is a piece of that. I don't know how many times I've looked up someone's name in Outlook [rather] than turn around and manually dial their number. The applications that we can envision are just the tip of the iceberg."

And as wireless carriers move into the IP realm, Elliott envisions Level 3 working with wireless carriers and offering specific value-added services. "One of the real advantages of this voice-over-IP movement is how the IP layer abstracts. The Holy Grail is to get the same type of services to work regardless of the access device."

Regardless of which strategic direction the company moves, market environment will play a major role.

"We don't think we're going to be perfect," O'Hara says. "We think we're going to be better than the competition." ☉

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Fiber optics are snaking through Tennessee soil

By SUE MCCLURE
Staff Writer

SPRING HILL — A massive, \$2 billion, coast-to-coast, fiber-optic network is being installed across Middle Tennessee, connecting Nashville and Memphis with 50 other major cities — and providing for the transfer of voice, data and images at the speed of light, via fiber-optic cables.

"The 16,000-mile network that we're putting in allows for much greater service at a faster rate, at a much lower cost," said Karen Morales, public relations manager for Kiewit Network Services, the program manager for Level 3 Communications, which is installing the fiber-optic network.

"This will allow for more and faster local and long-distance calls, as well as data transmission via computers, e-mail and video conferencing."

Level 3 Communications, a publicly traded company based in Broomfield, Colo., will act as telecommunications provider for its net-



JOHN PARTILLO / STAFF

Workers sink conduits that will house fiber-optic lines that will be part of a nationwide network.

work, leasing line space to other major telecommunications companies such as telephone companies and Internet providers.

"This is a win-win situation for everyone," said Johnny Werner, sales manager for

► Please see **CABLES, 2E**

Cables: Fiber optics snaking through soil across Midstate

FROM PAGE 1E

Voyager Online Inc., a Chattanooga-based Internet provider. "The fiber gives customers the speed they need."

Level 3 Communication's work on its intercity fiber-optic network began in Texas in July 1998 and has been snaking its way west, entering Memphis in mid-October 1999.

Work is currently under way in Maury, Williamson, Davidson, Robertson, Sumner and Wayne counties, and the Memphis-to-Nashville leg of the project should be completed by the end of May.

Bundles of 10-12 conduits, each 1 1/4 inch in diameter, are being buried along highway rights of way, Morales explained.

"Every so often, there's an entry pit — sort of a manhole — where the optic fiber can be blown into the conduits," Morales said. "That way, the network is continually up-

gradeable, but we won't have to go back through and tear up the ground to get to it."

The conduits will contain hundreds of pairs of fibers — each of which can carry 4 million simultaneous telephone conversations.

Fiber-optic technology uses light impulses along a glass or plastic wire, or fiber, to transmit information. The fiber-optic wire can carry much more information than traditional copper wire.

For example, one fiber pair can transmit 60 trillion bits of information per second, which is the equivalent of 750 million simultaneous phone calls — 15 times as much capacity as what currently serves New York, according to information provided by Level 3 Communications.

And while Nashville is not scheduled to be an initial "gateway facility" like Atlanta, Dallas and Cincinnati — cities that will have

Level 3 Communications offices located there to enhance service to business customers — it has been identified as "one of the markets for development," Morales said.

"Nashville will be a terminal site, which is like a step down from a gateway," Morales said, explaining that three portions of the national intercity network meet here, so fine-tuning of the system could be done here.

Morales said the national network is part of a larger, \$10 billion international program Level 3 Communications has launched that will connect the United States to Europe and Asia via underwater cables.

Work already has begun in Europe on the global system, the initial phase of which is slated for completion in 2001. ■

Sue McClure covers Maury County for *The Tennessean*. She can be reached at (931) 486-3611.

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HEADLINE: Sprint, MCI Declare Long Distance Dead ... Or At The Very Least Dying.

AUTHOR-ABSTRACT:

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BODY:

By John Sullivan

MCI WorldCom [WCOM] and Sprint [FON, PCS] took their recordbreaking merger before the FCC on Wednesday, while trying to downplay hints that the commission may take a dim view of the \$ 129 billion deal's competitive impact.

The Saturday before the Nov. 17 filing, the Washington Post ran a story
ing approval "unlikely" quoting unidentified sources who claimed regulators
would view the merger as a serious blow to competition in the long-distance
market.

(The FCC issued a terse response saying only, "No decision has been made on
this matter. When the application is filed, it will be given a thorough and
complete review.")

Upset by the story, but obviously aware they face intense regulatory
scrutiny, the companies came out swinging Wednesday.

Attorneys Michael Salsbury of MCI WorldCom and Richard Devlin of Sprint
argued the merger would be good for the market despite how it looks on the
surface.

Long distance no longer is a meaningful market segment, the attorneys said.

They argued the market is moving toward "all-distance" voice service, which
will be sold as part of a bundle of telecom services.

That position is intended to deal with protests that the merger would be a
lethal blow to long-distance competition.

Speaking before a Nov. 4 meeting of the Senate Judiciary Committee dealing
specifically with the merger, Sen. Herb Kohl (D-Wis.) said, "One need not be a
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Wireless Insider November 22, 1999

of rivals in an industry from three to two."

It was at the same hearing that MCI WorldCom CEO Bernard Ebbers argued that separate market for long distance created by the divestiture of AT&T [T] is eroding."

Ebbers and other officials of Sprint and MCI WorldCom have used the same argument elsewhere.

MCI and Sprint execs apparently realize that if they can group all telecom services into one big market, their combination looks less significant.

Commenting on the number two and three argument, Salsbury said, "We don't look at the market that way. The way we see it, this is really the number four and seven providers in the domestic telecommunications market."

Salsbury described MCI as the number four player behind AT&T, SBC [SBC] and Bell Atlantic [BEL], while he said Sprint comes in seventh, following GTE [GTE] and BellSouth [BLS].

After the merger, he added, the combined company would be fourth in revenues behind AT&T, SBC and the combined Bell Atlantic/GTE.

Wireless shoulders much of the burden of advancing the companies' arguments-particularly since wireless carriers are bundling longdistance with mobile airtime at a single price.

Ebbers told the Senate Judiciary Committee that it has been "the explosive growth of wireless telephony that has eliminated the artificial distinction between local and long-distance calling."

At Wednesday's conference, Devlin repeated that theme, saying, "The notion of all-distance pricing is here with us already, mainly in wireless."

Devlin also cited wireless operations as justification for claiming that the Bell operating companies are already in the longdistance market outside their home territories, regardless of the speed with which Section 271 applications grant them in-region longdistance rights.

Most importantly, the companies are relying on broadband wireless technology to bolster their strongest pro-competitive argument.

In Salsbury and Devlin's scenario, incumbent local exchange carriers control wireline access to homes, providing voice and highspeed data through twisted pair and DSL, while AT&T uses its cable acquisitions to bypass them with hybrid fiber-coax.

They argue that the merger would let MCI WorldCom and Sprint combine their MMDS capabilities to "create a third path to the home with wireless."

Devlin admitted, "it's not 100 percent clear that this is going to work yet," because of interface issues and the lack of technical standards.

However, he argued a merger would give MMDS the best chance of providing a third competitor in the overall broadband access market by letting the two

companies pool their capital and technical expertise.

It's interesting to see MCI WorldCom basing its best arguments in favor of merger on the impact of wireless-a market it's sometimes taken a dim view of in the past-and the supposition that the wireless approach to long-distance will be the wave of the future.

However, just because Ebbers has discovered wireless doesn't mean regulators who must approve his merger are going to follow along.

Salsbury and Devlin maintain that forward-looking analysis of anti-trust issues is something regulators do "all the time [because] that's what the merger guidelines tell them to do."

Yet some observers of the wireline regulatory landscape are dubious.

"I'm not persuaded that the FCC or the Department of Justice should be trying to guess what the market's going to look like three or five years down the road," said Rich Brecher, partner at the telecom law firm Greenberg Traurig and a former Common Carrier Bureau attorney. "Right now, I think there are still separate interexchange and local exchange markets. And right now is when the merger has to be evaluated."

Putting aside questionable claims that long distance is dead, Brecher went on to say that he is "not terribly bothered by [the merger] from an anti-competitive standpoint."

Furthermore, he doesn't believe the combined market share of the two carriers would represent undue market power.

"Would a combined MCI and Sprint have the ability to exercise market power with about 30 percent of the market?" he asked. "I doubt it."

Brecher guessed that the merger would ultimately gain approval, if only because "it would take a lot of guts for the agency to turn down a merger where the stakes are that high. You've got to be absolutely sure you're doing the right thing, and I think it's going to be very difficult to do that."

LANGUAGE: ENGLISH

IAC-CREATE-DATE: November 29, 1999

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CNN WEB SITES:

Internet company entering long-distance phone market

November 8, 1999

Web posted at: 12:01 PM EST (1701 GMT)

NEW YORK (AP) -- Priceline.com, the Internet service that lets customers name their price for plane tickets, hotel rooms, cars and groceries, is moving into the long distance phone business.

An announcement was planned today.

The service, which would begin early next year, would let customers bid for blocks of long-distance calling time.

Daniel H. Schulman, the Web service's president and chief operating officer, said replacing AT&T, Sprint and the other long-distance providers is not the goal. Rather, his company will work with those phone companies to maximize usage of their existing phone networks.

"If somebody isn't talking over that fiber, it's a waste," Schulman said. "But if you lower the cost of the call to increase demand, you have to lower it for all existing customers, destroying prices, revenue and profits."

Priceline.com seeks to bypass that restriction by letting carriers gauge demand ahead of time and lower rates only on the calls that otherwise would not be made at regular prices. Schulman predicted savings of 20 percent to 30 percent off regular rates.

Customers would go the Web site and name the price they want to pay for a certain number of minutes of calls to a specific domestic or international location. Long-distance carriers respond if they can meet the demand. Callers also have per-call options, as well as a call-anywhere plan.

Once the requested rate is matched, callers will have to dial a special number. The company promises no surcharges, hidden fees or minimum calling times and customers can keep their regular carrier for normal calling.

Priceline.com enters the market at a time of intense competition among large and small long-distance carriers with a variety of sometimes-

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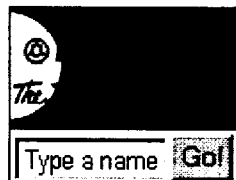
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Last week, priceline.com began offering grocery services. Coupled with increased demand for Thanksgiving weekend travel tickets and its own prescheduled computer upgrades, the company faced delays in filling grocery orders Wednesday and Thursday.

Schulman said the problem was fixed by Friday, and priceline.com will be ready to handle the long-distance business next year.

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San Diego, CA

Competition spawns long distance deals

News Archive: September 03, 1999
by Beth Tornatore

SAN DIEGO -The major long distance companies are offering consumers some new calling plans that could save them money.

AT&T is cutting its price to 7 cents a minute for domestic calls. The new rate is good 24 hours a day, every day. There is a catch though. To get the lower rate, you must pay a \$5.95 monthly fee. That means that the plan is most attractive to people who make a lot of long distance calls during daytime hours. AT&T's monthly fee drops to \$4.95 if you also use the company for your in-state long-distance calls.

AT&T came up with the new plan to keep up with Sprint and MCI, both of which lowered their long distance rates earlier this summer. Consumer experts like Jodi Beeb at the Utility Consumers Action Network in San Diego say that there are better deals out there.

"There are much better long distance companies out there that do not have minimum charges, and their rates are actually more competitive than AT&T," Beebe said. "It's just a matter of looking around and finding them."

You can compare various plans by using the Internet links below.

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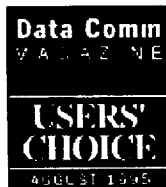
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Users Rate Long-Distance Carriers

AT&T earns top marks in all categories for a second straight year

[Survey Methodology]

Best Overall



AT&T

Superior technology ratings and solid customer service numbers earned AT&T top honors in all four service categories in this year's survey: dedicated services, switched digital services, frame relay services, and managed network services. The only other carrier to pose a serious challenge to AT&T's title was Sprint Corp., which tied for the top spot in the managed network services ratings.

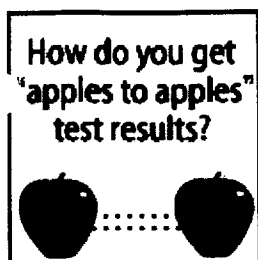
Data Comm
MAGAZINE

USER SURVEY

Maybe being No. 1 isn't so tough after all. For the second year running, AT&T has swept top honors in Data Comm's annual reader survey of U.S. long-distance carrier customers. The nation's largest carrier continues to outpace its rivals in both network performance and customer service, according to network managers responding to this year's poll.

AT&T garnered top marks in almost every surveyed category for dedicated, frame relay, and switched digital services. As in past

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years, the carrier registered its highest marks for network performance, reflecting AT&T's technology prowess (see "Survey Ratings at a Glance"). But users also credit AT&T with delivering the best customer service among long-distance carriers, continuing a trend that started with last year's survey.

Other than AT&T, the big winner in this year's survey is Sprint Corp. (Kansas City, Mo.), which placed second to AT&T overall. Sprint's strongest marks came for its managed network services; in that category, Sprint actually tied AT&T for first place.

The news is less encouraging for the nation's second-largest long-distance carrier, MCI Communications Corp. (Washington, D.C.). MCI, which shared the top slot with AT&T in 1993's user survey, finished last overall in this year's poll, trailing AT&T, Sprint, and Wiltel (now known as LDDS Worldcom, Tulsa, Okla.). MCI's overall score even fell below the collective mark posted by smaller alternative carriers that didn't register enough responses to be included individually in the survey results.

Table 1: Dedicated Services Scores

	AT&T	Sprint	Wiltel	MCI	Other
OVERALL SCORE	4.02	3.86	3.80	3.63	3.68
NETWORK PERFORMANCE					
Circuit availability and reliability (uptime per month)	4.41	4.14	4.12	3.84	4.00
Circuit quality (bit error rate and synchronization)	4.37	4.13	4.20	3.91	4.00
User-controlled network monitoring and management	3.81	3.64	3.51	3.29	3.50
NETWORK PERFORMANCE MEAN SCORE	4.22	4.00	3.98	3.72	3.84
CUSTOMER SERVICE					
Network planning and installation	3.86	3.80	3.70	3.57	3.72
Billing (accuracy and format)	3.70	3.51	3.72	3.57	3.63
Timeliness and quality of repairs	3.99	3.85	3.57	3.50	3.72
CUSTOMER SERVICE MEAN SCORE	3.84	3.73	3.64	3.55	3.68

Key trends emerging from the 1995 Data Comm carrier survey include the following:

- Overall, users are pleased the technology that long-distance carriers deliver. AT&T and Sprint both registered scores at or

above 4.00 (on a scale of 1 to 5) for the technical quality of their dedicated and switched digital services (see Tables 1 and 2), while Wiltel just missed that mark for its dedicated services (for more about the survey ratings, see "Survey Methodology"). AT&T also exceeded the 4.00 mark for the performance of its frame relay services.

Table 2: Switched Digital Services Scores

	Other AT&T Sprint MCI carriers			
OVERALL SCORE	4.08	3.97	3.71	3.79
NETWORK PERFORMANCE				
Circuit availability and reliability (uptime per month)	4.37	4.29	3.96	4.10
Circuit quality and synchronization	4.26	4.15	3.82	4.05
Call setup speed	4.13	3.90	3.68	3.93
NETWORK PERFORMANCE MEAN SCORE	4.26	4.11	3.82	4.02
CUSTOMER SERVICE				
Network planning and installation	3.93	3.90	3.62	3.62
Billing (configuration and flexibility)	3.79	3.83	3.53	3.51
Timeliness and quality of repairs	3.97	3.78	3.54	3.49
CUSTOMER SERVICE MEAN SCORE	3.89	3.84	3.55	3.53
Number of valid responses	216	41	69	42

- One network performance area that needs shoring up is network monitoring and management, according to survey respondents. In the performance ratings for dedicated services, all carriers got their lowest marks for the quality of their user-controlled monitoring and management facilities.
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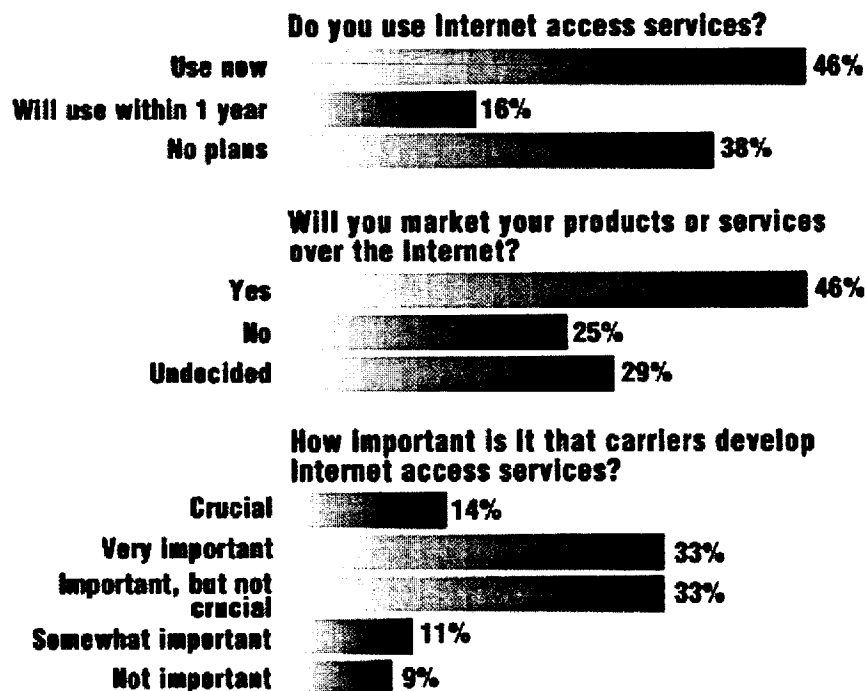
Table 3: Frame Relay Services Scores

	Other AT&T Sprint MCI Wiltel carriers				
OVERALL SCORE	3.86	3.67	3.66	3.61	3.54
NETWORK PERFORMANCE					

- Despite their qualms about customer service, corporate networkers are moving to frame relay in a big way. About 46 percent of the respondents to this year's survey said their organizations are now using frame relay services-that's up from 18 percent in last year's survey and 11 percent in 1993's poll. Soaring demand for frame relay in the past year led to some big installation delays by AT&T-a problem reflected in the carrier's low score for the timeliness of its frame relay installations.
- Internet fever is spreading through net management circles. More than half the respondents to this year's survey categorized carrier Internet access services as important, very important, or crucial, and about 46 percent said their organizations plan to market products or services over the Internet (see Figure 1).

Figure 1: 'Net Interest

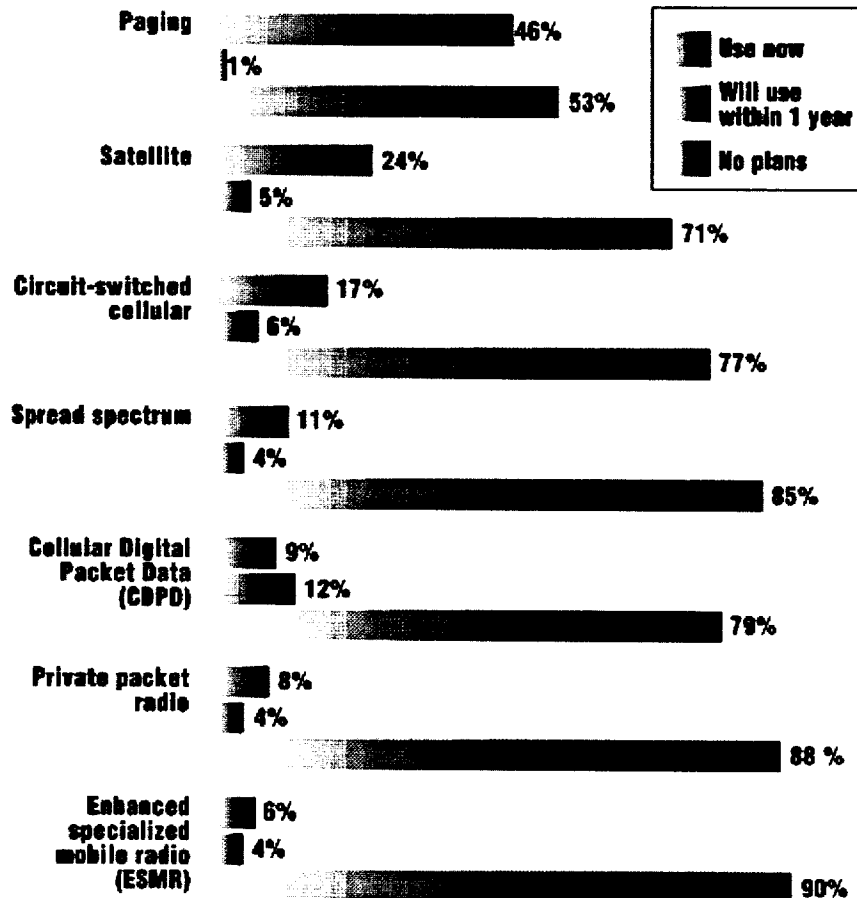
More than 60 percent of the respondents to this year's survey say their companies will be using Internet access services by this time next year, and a full 80 percent are looking to long-distance carriers to develop and offer those services.



- Wireless networking is shaping up to be a colossal dud with network managers. Aside from paging services, wireless is generating very little interest among corporate networkers. Nearly four out of five survey respondents said they have no plans to implement networks based on Cellular Digital Packet Data (CDPD) technology, and only 23 percent expected to have circuit-switched cellular service in place by this time next year (see Figure 2).

Figure 2: Unwired and Unwanted

Right now, wireless WAN services hold little more than niche appeal to corporate networkers, according to results from this year's survey. The vast majority of net managers surveyed have no plans to install wireless services in the coming year.



- Interest in SMDS (Switched Multimegabit Data Service) remains low. About 10 percent of the net managers responding to the survey said they now use SMDS, with another 9 percent expecting to deploy the service within the next year. Meanwhile, a quarter of this year's respondents said they expect to start using ATM (asynchronous transfer mode) in the next 12 months.

TOP OF THE LINE

Reflecting its position as the biggest long-distance carrier in the U.S., AT&T accounted for a wide majority of the responses to this year's survey. Of the 420 users included in the 1995 survey, 316 designated AT&T as their primary or secondary carrier for dedicated services.

In a follow-up interview conducted after the survey, one respondent

credited AT&T with delivering service a cut above the competition. "The downtime with AT&T is significantly lower than its competitors, and AT&T is much quicker to make repairs," says Leonard Howell, network hardware specialist for Airline Tariff Publishing Co. (Washington, D.C.), which operates a database for airline airfares, car rentals, and reservations services. Howell uses AT&T and MCI for his company's carrier services.

Sprint also earned kudos for its technology savvy. "Sprint's frame relay network is built more on ATM strategy than any other carrier network," says Martin Zoiss, telecommunications specialist for Bindley Western (Indianapolis), a pharmaceutical wholesaler. "Sprint is building its network much larger than it needs to be," Zoiss adds. "For me, that means I don't have to wait 30 days for network upgrades to catch up with traffic requirements."

Meanwhile, MCI users say their carrier has plenty of performance problems to iron out. "The quality of service and system uptime isn't always there with MCI," says Victor Gutierrez, network group leader for Tenet Healthcare Corp. (Santa Monica, Calif.). "There are a lot of major outages."

MCI says it hears its customers' call for better performance. "We readily acknowledge we had problems in 1994, and the network was not up to par," says Stephen Von Rump, vice president of marketing for MCI's data services. MCI has initiated a major network upgrade involving Synchronous Optical Network (Sonet) technology, Von Rump says.

But there may be an even larger hurdle to overcome. Many still don't view MCI as a technology leader, even though it offers an extensive portfolio of data services and has taken the lead among competitors in offering businesses access to the Internet. "MCI is still basically a good marketing company for cut-rate commodity services," observes one respondent, a vice president of a large financial services company. "It's not a good technology company."

The one performance weakness shared by all long-distance carriers is the quality of network monitoring and management tools, according to survey respondents. Topping the net manager wish list are better graphical user interfaces (GUIs), the ability to make changes to networks quickly, and the availability of real-time performance data for network management systems.

CALL TO ACTION

Complaints about network management have been loud enough to stir some action. All four major carriers say they are upgrading their network management systems. For example, Sprint plans to introduce an enhanced network management feature later this year for users of its dedicated and switched digital services. The upgrade will offer a better GUI for all customer workstations, along with customer-

controlled reconfiguration and bandwidth-on-demand capabilities, the carrier says.

Network managers responding to the survey also say they want carriers to draw on network management data to make recommendations on how to improve user networks. One respondent says frame relay service providers should use network management data to suggest increases or decreases in customer CIRs (committed information rates), the minimum throughput guaranteed for frame relay connections.

AT&T is planning to offer just that feature in 1996, says Steve Hindman, product management director for the carrier's Interspan High Speed Data Services. Hindman says the new system will automatically summarize performance data, suggest changes electronically to customers, and implement those changes on approval by the network manager.

ROOM FOR IMPROVEMENT

User complaints about the quality of carrier network management and monitoring tools stem in part from customer service problems. In some cases, carriers may already offer the kinds of management and monitoring tools users want. The problem is that the carriers haven't told their customers that those tools exist.

"We have no idea what's going on with our network when there's a problem," says Howard Jones, IS manager for Southeast Paper Manufacturing Co. (Atlanta), which uses low-speed leased lines and switched digital services from AT&T and MCI. "We'd love an affordable monitoring service." Jones says he has asked both carriers about such facilities in the past, but neither responded to his queries. As it turns out, both AT&T and MCI offer SNMP-based monitoring services that could resolve Jones's concern.

Respondents to this year's survey say carriers need to do a better job of handling basic customer service tasks, such as returning phone calls promptly, training qualified customer service representatives, and supplying quick, courteous responses during network outages.

MCI, which received this year's low score in customer service, needs to be more "people-oriented," says Howell of Airline Tariff Publishing. Howell says that when he calls MCI to report a service problem, service reps are quick to tell him he's wrong before checking his circuits in any detail. In one case, he was shunted to five different customer service numbers before an MCI rep realized he had contacted the right number the first time.

BILL TO SUIT

Some respondents say their biggest customer service problems with long-distance carriers involve billing. Inaccuracies top the list of

billing complaints; users also criticize carrier bills for being hard to read.

"It just seems the bills are never right," says Jones, who notes that at Southeast Paper, one clerk spends at least a week each month deciphering telecom bills and pinpointing inaccuracies.

The Long Island Railroad (New York) spot-checks its telecom bills once or twice a year because analyzing them every month is too time-consuming, says George Udalovas, manager of network planning for the railroad. "We find an enormous number of errors," Udalovas says. "We can wind up with \$50,000 to \$100,000 in credits from two days' work."

Like Udalovas, a number of net managers indicated that they don't analyze their carrier bills regularly because they don't have the time or staff. In some cases, the responsibility for auditing bills is handed over to the company accounting department. This creates another potential problem: Accountants can have a hard time understanding telecom bills. "The people evaluating those bills are generally not data communications people, they're accountants," says Keith Bastin, network manager for the State of Georgia's Department of Administrative Services (Atlanta). "They call me fairly often to ask me questions about them." Bastin and other network managers suggest that carriers make their bills easier to read and more logical to follow.

Of the four services categories covered in the survey, respondents gave their lowest ratings to carrier frame relay services. On the bright side, some of that user disgruntlement could be traced directly to the phenomenal growth rate in frame relay usage. Network managers new to frame relay are still dealing with a fairly steep learning curve. At the same time, carriers are scurrying to keep their networks robust enough to handle demand.

Along these lines, respondents were least satisfied with the timeliness of new frame relay installations. Of the four major frame relay carriers, AT&T earned the lowest rating for installation quickness—no surprise, considering that many AT&T users found themselves waiting up to four months for the carrier to install new frame relay circuits.

AT&T says it simply couldn't keep up with demand, adding that at one point last year, it was installing one or two frame relay switches every business day to catch up. The carrier says its installation problem has since been solved. AT&T expects to hold to frame relay installation times of 30 days for 56-kbit/s ports and 45 days for all other ports, Hindman says.

FOOD FOR THOUGHT

Along with gauging basic attitudes toward frame relay service, this

year's Data Comm carrier survey asked net managers to divulge their frame relay deployment strategies. Judging from the survey responses, ISDN may finally ride frame relay's coattails out of networking oblivion. Nearly 20 percent of all survey respondents said they already use ISDN to access frame relay services, and another 23 percent plan to do so within the next 12 months. These numbers indicate that net managers are warming to ISDN as a low-cost, switched access alternative for small, remote offices or telecommuters. Depending on the local carrier, ISDN costs anywhere from \$23 to \$65 per month, plus usage. ISDN access is now available at about 70 percent of all local exchange carrier switches, and nearly all of the frame relay service providers are building interfaces into their networks to accept ISDN access.

ON THE DIAL

Dial-up access to frame relay is getting some attention as well. More than 12 percent of the net managers polled said they're using dial-up access now, and another 12 percent plan to implement it within the next year.

Based on survey responses, carriers can expect to hear more demands for interconnecting their frame relay services. Almost 40 percent of the net managers surveyed said they expect to take advantage of frame relay NNI (network-to-network interface) connections by next year. The NNI specification defines how two frame relay networks are interconnected. But local and long-distance carriers have fallen far behind on their interconnection delivery dates.

Network managers say they want NNI connections between local and long-distance networks, as well as among long-distance networks. Links between local and long-distance carriers are valuable to corporations that have several frame relay sites within one metropolitan area that need to be connected to other sites over the wide area. Without the NNI, these companies have to install leased lines for access to the long-distance carrier's frame relay network.

The Principal Financial Group (Des Moines, Iowa) is basing its nationwide frame relay network on the deployment of NNIs, says Keith Kratochvil, research analyst for the company. Principal plans to use frame relay services within metropolitan areas from local exchange providers and connect those local networks using a long-distance carrier frame relay service. "That's how the next generation of frame relay will look," Kratochvil says.

MESH APPEAL

The next generation of frame relay likely will include another feature-meshed networking. With meshed frame relay, locations in a corporate network have PVCs (permanent virtual circuits) that connect to most or all of the other sites in the network. That's different from the nonmeshed networks that prevail today, in which

sites typically are linked via a single PVC to a central location.

Right now, most net managers aren't thinking about meshed frame relay. More than 80 percent of the respondents to this year's survey said they have no plans to build meshed frame relay networks. But AT&T is betting that corporate networkers will make the move to meshed services sooner rather than later. The carrier recently revamped its frame relay pricing structure based on the assumption that more customers will ask for meshed networks. AT&T claims that at least 80 percent of its frame relay customers have plans to build meshed frame relay networks.

Today's most common frame relay application is LAN-to-LAN internetworking, which doesn't require a meshed design—each remote site usually only needs to be connected to a central server. But one growing frame relay application, SNA internetworking, does require some level of meshed networking for host backup. Each remote site would require at least two PVCs—one to the primary data center and one to the backup center. The trend toward combining LAN and SNA networks into one large frame relay network also should drive demand for meshed services.

One company that's started making the move to meshed frame relay is Bindley Western, which is migrating its SNA traffic from a private network to Sprint's frame relay network. That frame relay network also will handle LAN-based traffic, including e-mail, Zoiss says. The network will be partially meshed, with at least three frame relay PVCs extending from each host site to the regional sites, Zoiss adds.

DON'T FORGET THE 'NET

Along with upgrading frame relay services, carriers need to focus on delivering Internet access services, according to survey respondents.

"In the long term, the current communications leaders will be providing the bulk of Internet access," says Kratochvil of Principal Financial. He says the big long-distance carriers have the technology and financial backing to develop Internet features, like billing services, and to ensure security isn't compromised.

So far, MCI has taken the lead by developing a comprehensive Internet access service that includes customized software. Both AT&T and Sprint say they're working on a competing service. In the meantime, users can access the Internet through Sprint's Sprintlink TCP/IP service, or through all the carriers' e-mail services.

Respondents say they favor using long-distance carriers for Internet access because they can offer the best variety of access options, including dial-up circuits, leased lines, switched digital services, and frame relay. This kind of flexibility can translate to lower network costs, as managers tailor access options to individual sites.

Not everyone is jumping on the Internet bandwagon right away, however. Udalovas of Long Island Railroad says he's throttling back any Internet plans because he doesn't see any benefits in connecting to the Internet too early. He's concerned about the quality and integrity of firewalls, gateways, and administrative tools. He thinks they all will be improved at the expense of tough lessons learned by early adopters.

LESS WIRELESS

While net managers are moving ahead with frame relay and Internet access plans, they're keeping SMDS and wireless deployment on the back burner. Although service providers that offer SMDS say their customer base is growing rapidly, 82 percent of the respondents to this year's survey said SMDS is not in their plans.

Of the major long-distance carriers, only MCI offers SMDS; the service also is available from five of the seven regional Bell operating companies. SMDS proponents contend that poor marketing is at the heart of the technology's problems. The service actually provides higher speeds than frame relay and more closely resembles the routing structure of ATM, they argue.

"The majority of SMDS customers came to us saying they wanted ATM, when actually SMDS was the better solution," says MCI's Von Rump. If that theory holds true, there could be a larger pool of potential SMDS users-25 percent of the respondents to this year's survey said they plan to use ATM within the next year.

Despite the recent hoopla over the coming wireless revolution, corporate networkers responding to the survey are content to keep living in the wired world. Except for paging services, most of which are already in place, most wireless WAN services aren't in net managers' deployment plans.

The lack of interest in wireless has taken some net managers by surprise. "Wireless is new, and people just don't realize the advantages yet," says Udalovas, who adds that the Long Island Railroad is using spread-spectrum technology for LAN-to-LAN connectivity between main sites and rented facilities. Udalovas also is evaluating private packet radio and ESMR (enhanced specialized mobile radio) services. These services, combined with handheld computers, would let technicians working in the freight operations facilities place orders or keep track of equipment problems electronically.

"We foresee a lot of benefits with wireless," Udalovas says. "Sure, some businesses are more conducive to wireless than others. But I think a lot of people can see a business case for wireless if they start looking into it."

Robin Gareiss is wide-area networks editor for Data Communications, specializing in career services. she is based on Chicago and can be reached on the Internet at rgareiss@data.com.

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The 1995 Data Comm User Survey on long-distance carriers included a two-page questionnaire and incentive mailed on May 1, 1995, to a random sample of 2,500 subscribers. The survey results are based on valid responses from 420 readers, many of whom use and rated more than one carrier for the services surveyed. All respondents affiliated with carriers were eliminated from the survey.

The survey form listed four carriers--AT&T, MCI Communications Corp. (Washington, D.C.), Sprint Corp. (Kansas City, Mo.), and Wiltel Inc. (now LDDS Worldcom, Tulsa, Okla.)--with a write-in space for other carriers. Respondents were asked to list their primary and secondary carriers for dedicated, switched digital, frame relay, and managed network services. They were then asked to rate those carriers in network performance and customer service categories using the following scale: 5 = excellent; 4 = very good; 3 = good; 2 = fair; 1 = poor; N/A = not applicable.

Not enough responses came back for Wiltel in the managed network and switched digital services categories to rank that carrier separately. In those categories, Wiltel is included in the "Other carriers" listing in the survey computations (see Tables 1 through 4). No other carrier garnered enough write-in responses to be tabulated individually.

Scores were calculated by summing each carrier's ratings in each category and dividing by the number of responses. For each service type, each carrier was rated on network performance and customer service; those scores were then averaged to yield an overall score for that service type. The overall scores were also adjusted to reflect the number of responses to each individual question. Then, all ratings in every category were averaged to provide comprehensive scores for customer service, network performance, and overall performance. --
R.G.

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Description

Just as the Internet has revolutionized the communications marketplace, Internet Protocol (IP) Telephony will change the face of long distance competition. In the 14 years since divestiture, three companies have emerged as the dominant players in long distance services. Driven by increased demand and the emergence of new technologies, a wave of competitors are now lighting all new fiber networks.

Between 1992 and 1997, long distance service revenue grew at a compound annual rate of 8.4%. Despite an increasing number of facilities-based competitors and declining prices, revenues have grown faster than minutes of use. Underlying this trend is an increased reliance on data communications and their associated enhanced services. Likewise, the Internet has grown by all measures into the triple digits. In the near future, voice and data traffic will respectively earn equal revenues.

As the voice and data markets have grown, so too have the networks that carry their traffic. However, little economies exist in maintaining two separate networks. The emergence of IP Telephony brings the potential to, once and for all, efficiently unify voice and data traffic.

The Strategis Group's report, Long Distance Competition: IP Telephony, RBOCs, IXCs, and Fiber provides:

- An overview of IP technology
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- Profiles of incumbent and competitive carriers
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N E W S A N A L Y S I S

Bandwidth Of Traders

**Glut of exchanges results in slashed prices.
What's the deal?**

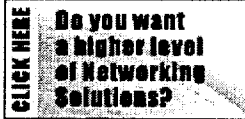
by John Blau

Leave it to a bunch of entrepreneurs to ruin a good thing--or at least a lucrative thing for some in the chummy world of global telecommunications. The rise of new bandwidth exchanges, together with a growing army of bandwidth suppliers, has sliced into European and U.S. bandwidth prices. Bandwidth trader Band-X Ltd. (London), in fact, reports that prices for wholesale circuits on major European routes plunged 62 percent last year. That's impressive but possibly only a start, as dealing in circuits and packets has only just begun.

Such trading isn't entirely new. Various brokers and exchanges have dealt switched minutes for the last few years. What has changed is the growing emphasis on hawking spare bandwidth capacity. The market's still small, but it's expected to grow. Market researcher Phillips Tarifica Ltd. (London) predicts bandwidth trading will become an \$8 billion annual business by 2002. And, surprisingly, Europe may take center stage.

One reason for Europe's possible dominance is its concentration of routes. Seven of the top 10 international Internet routes now begin and end on the Continent, according to market researcher TeleGeography Inc. (Washington, D.C.). Several new exchanges--InterXion (Amsterdam), Hanse-X (Hamburg) and Iber-X (Madrid)--have opened shop to capitalize on this. None, however, seems as advanced as Band-X, Europe's first telecom exchange, launched in 1997.

Band-X's advantage lies in its unequalled ability to trade bandwidth over Internet protocol (IP) networks in real time. Aimed largely at Internet service providers (ISPs), the service requires customers to interconnect to Band-X's router at Telehouse International Corporation of Europe Ltd. (London), a facility where many carriers and ISPs have points of presence (POPs). Customers can link at

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speeds of 2, 45 and 155 Mbit/s. They pay on a unique, usage-based, bit-per-second basis.

The automated service also lets buyers and sellers remain anonymous, allowing big suppliers to unload access capacity at low prices without cannibalizing their branded wholesale services. Band-X's other industry innovation is its ability to trade on quality of service (QoS), offering IP services of different quality from different carriers at different prices. "I believe automated bandwidth trading will really come at the IP level," says Band-X cofounder Richard Elliott. "You can automate point-to-point trading of circuits, say, between two big cities, but that means you must have facilities at each end--which is a bit restrictive."

Bandwidth exchanges aren't limited to Europe. They're also sprouting up in the United States. The growing list includes AIG Telecommunications LLC (Greenwich, Conn.), Arbinet Communications Inc. (New York), Enron Communications Inc. (Portland, Ore.), RateXchange (San Francisco) and The Global TeleExchange Inc. (Washington, D.C.). Enron, a wholly owned subsidiary of Enron Corp. (Houston), trades monthly incremental contracts for DS-3 (45-Mbit/s) bandwidth between New York and Los Angeles through its time-division multiplexing (TDM) service. It plans to connect London by May and eventually roll out a service similar to Band-X's that sells DS-3 bandwidth over IP networks.

Enron, Band-X and others seem well positioned, at least according to Philip Low, deputy director of Phillips Tarifica and author of a recent report on online exchanges. He claims IP minutes will play an increasingly important role in international bandwidth and minutes markets. In two years, he projects, IP minutes will account for at least 23 percent of total global traffic, half of which will be traded over exchanges.

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NEWS ANALYSIS

Waiting for the Light

All-optical nets could answer carriers' prayers--someday

by Peter Heywood

To hear Lucent tell it, the introduction last month of what it's calling "the industry's first high-capacity all-optical router" will turn out to be a defining moment in telecom history. It will allow service providers to boost the capacity of their networks almost limitlessly, slash costs and shrink provisioning times from months to minutes.

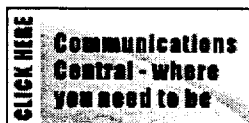
Sound too good to be true? It probably is, at least for now.

But a handful of vendors, including Lucent Technologies Inc. and several startups, are in the early stages of making some important advances in this direction. They're attempting to cut down on the use of electrical interfaces in carrier networks in favor of all-optical gear. Unfortunately, they're nowhere near the ultimate goal of eliminating them entirely.

Experts say a breakthrough in fundamental physics will be needed before the genuine all-optical router—one that can read addresses in packets and route them accordingly—arrives. And the development of all-optical cross-connects isn't without its challenges. Meanwhile, naysayers question whether all-optical products can scale to the size required by carriers, and whether the absence of electrical interfaces will make networks unmanageable.

So why invest in optical networks? Many believe that having no electrical interfaces will make networks future-proof, allowing them to carry any sort of traffic without any upgrades to equipment at junction points. It eliminates requirements for Synchronous Optical Network/Synchronous Digital Hierarchy (Sonet/SDH) equipment, and therefore bottlenecks at those locations. And it slashes investment costs: Some experts predict that carriers could realize savings of 70 to 90 percent.

Beyond money, service providers will save time. Current



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developments aim to give carriers the chance to configure on their own instead of sending out engineers to connect fibers at different locations manually. "What takes 100 days for broadband services will take 10 days. What takes 10 days will take one day," says Matt Bross, chief technology officer of Williams Communications Group Inc. (Tulsa, Okla.). Vendors say the improvement will be even more dramatic. "You'll be able to provision capacity in minutes or hours as opposed to months," says Fahri Diner, president and CEO of Qtera Corp. (Boca Raton, Fla.), a startup developing a package of all-optical equipment.



Carriers agree it is critical to get up to speed on the latest developments in optical networks. "We're at an inflection point in the development of optical networks," says Bross. Carriers that don't grab the opportunities offered by advances in optical networking technology will find it hard to compete in the future, he adds. Williams is testing optical equipment for its backbone. The promises are clear, but getting there won't be easy. Technologies for shunting light in different directions are in their infancy, and the lack of standards in optical networking can make electrical interfaces a practical necessity.

"There's no standard for connecting one shade of blue light to another shade of blue light," says Nicholas DeVito, director of marketing at Tellium Inc. (Ocean Port, N.J.), a startup with one of the few optical products actually available and deployed in the market.

To make matters more complicated, vendors often overstate their all-optical credentials. Not everything is as it seems.

A few startups--including Qtera and Corvis Corp. (Columbia, Md.)--are developing complete packages of optical cross-connects, transmission systems and management systems that eliminate all electrical interfaces. But their cross-connects can't match Lucent's claim of 256-by-256 port capacity. In fact, Corvis only boasts a 6-by-6 port capacity--a long way from the 1012-by-1012 on most carriers' wish lists. Corvis plans to release its product in the first quarter of 2000; Qtera, in the second half of the year. Lucent's product will be available at the end of 2000.

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**Low-Volume Long-Distance Usage
Summary of CompTel's Comments
September 22, 1999**

I. The Long Distance Market Is Fully Competitive And, Therefore, Does Not Warrant Pricing Regulation

- ❖ Although CompTel supports the Commission's goals of promoting universal service and securing the benefits of competition for all consumers regardless of their usage or income levels, CompTel strongly opposes any efforts by the Commission to intervene in the pricing decisions of non-dominant long distance carriers.
- ❖ Consumers who are unhappy with their long distance company's prices have literally hundreds of other carriers to choose from. Additionally, the premise behind the NOI, that low volume users are low income, is flawed.
- ❖ Minimum usage charges and other line item fees are also the result of Commission action; that is, the Commission encouraged the levying of per line fees when it imposed the Primary Interexchange Carrier Charge ("PICC") and other per line administrative costs associated with the collection of new Universal Service charges. Because the costs are government mandated, carriers should not be criticized for seeking to recover those costs through flat rates or minimum usage fees.

II. The Commission's Primary Objective Should Be To Ensure That Customer Rates Reflect Market Prices

- ❖ Long distance pricing has become self-regulating through robust competition. In fact, between 1992 and 1997 competition in the long distance industry brought per minute rates down by 33% on average. Additionally, a one-minute call at today's rates costs up to 80% less than the same call did seven years ago.

A. Allow Customers To Subscribe To Local Services Only

- ❖ Nonetheless, one way to help ensure that low-income or low-volume users can avoid flat-rated and minimum service charges associated with long distance services is to require ILECs to offer customers the option of subscribing to local services only. Such customers could continue to have long distance choices through prepaid calling cards, pay telephones and other mechanisms.

B. Reform The Way The PICC Is Assessed

- ❖ CompTel is also proposing that the Commission reform assessment methods for the PICC. In short, as CompTel has commented before, ILECs should bill the PICC directly to the end user because ILECs are the beneficiaries of the PICC. The current rules that force IXCs to be the middlemen is highly inefficient.

III. CompTel Opposes Any Proposal To Expand The Universal Service Fund Or Regulate How Carriers Pass Through Access Charges

A. There Is No Basis To Expand the Universal Service Fund to Include Long Distance Services

- ❖ CompTel opposes any effort to expand the Universal Service Fund or regulate how carriers pass through access charges. Furthermore, CompTel opposes any requirements that carriers include consumer education billing inserts due to the high cost of producing such inserts - a cost that would ultimately be borne by consumers.

B. The Commission Should Refrain From Inquiring About The Reasonableness Of Carriers' Charges To Recover USF Charges and PICCs

- ❖ There is no objective way for the Commission to judge accurately whether a particular IXC's charges are cost-based. Rather, the Commission should rely upon market forces in the intensely competitive long distance market to ensure reasonable practices by non-dominant carriers. Should there arise a case where the Commission or customer believes that a carrier may be recovering its access charge and universal service costs in unreasonable ways, the Commission should use its enforcement authority under Title II of the Communications Act, or if appropriate, by opening rulemaking dockets to address those issues directly.

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Low-Volume Long-Distance Usage)

CC Docket No. 99-249

To: The Commission

COMMENTS OF THE
COMPETITIVE TELECOMMUNICATIONS ASSOCIATION

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**Before the
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In the Matter of)	
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To: The Commission

**COMMENTS OF THE
COMPETITIVE TELECOMMUNICATIONS ASSOCIATION**

The Competitive Telecommunications Association ("CompTel"),¹ by its attorneys, hereby responds to the Commission's *Notice of Inquiry* ("NOI") released on July 8, 1999 in the above-captioned proceeding.² As discussed in these comments, CompTel strongly supports the Commission's efforts to promote universal service and secure the benefits of competition for all consumers, regardless of usage or income levels. At the same time, CompTel strongly opposes any efforts by the Commission to intervene in the marketplace pricing decisions of non-dominant long distance carriers. The long distance market is sufficiently competitive so as to remove the need for such intervention. In CompTel's view, the development of certain minimum usage and flat-rated calling plans as options for callers reflects the competitive nature of the long distance market today. Because low-income customers have a

¹ With approximately 350 members, CompTel is the principal industry association representing U.S., international and global competitive telecommunications carriers and their suppliers, and hence, has a direct interest in this proceeding.

² *In the Matter of Low-Volume Long Distance Users, Notice of Inquiry*, CC Docket No. 99-249 (Rel. July 8, 1999).

plethora of low-priced calling options that do not require the payment of monthly or flat fees, there is no reason for the Commission to be concerned about marketplace developments in this industry segment.

I. THE LONG DISTANCE MARKET IS FULLY COMPETITIVE AND, THEREFORE, DOES NOT WARRANT PRICING REGULATION

CompTel strongly supports the Commission's efforts to ensure that all consumers -- regardless their usage or income levels -- reap the benefits of competition in the long distance market. Since the divestiture of AT&T from the Bell Operating Companies in 1984, the Commission consistently has implemented policies designed to promote competition in the long distance market and to pass the benefits of such competition on to the end user customer. It is due to these efforts that the long distance market is now fully competitive, requiring minimal Commission oversight of non-dominant carriers.

While CompTel supports the Commission's goal of ensuring that low-volume residential and single-line business customers benefit from decreasing long distance rates and universal service and access charge reforms, CompTel opposes any efforts by the Commission to intervene in the marketplace pricing decisions of non-dominant carriers. First, CompTel believes that Commission regulation of long distance rates is unwarranted in the current market. As stated above, the long distance market is sufficiently competitive so as to eliminate the need for pricing regulation. There are hundreds of long distance carriers offering multiple rate plans and service options from which customers may choose. While some plans include minimum usage charges in their basic rate plans, many others do not. In addition, 1010XXX dial-around carriers are now ubiquitous in the market and many advertise heavily their multiple rate plans and service options to fit a range of customer needs. Significantly, under the casual calling plans, customers

are not required to presubscribe to an interexchange carrier at all and, if they choose that option, they can avoid many of the flat or minimum charges imposed by carriers upon their presubscribed customers while still paying low per-minute calling rates.

Second, because the marketplace is fully competitive, the Commission can and should presume that any flat or minimum rates imposed by IXC's reflect marketplace forces. As the Commission recognized in the *AT&T Reclassification Order*,³ in a competitive environment where numerous alternatives for service exist, carriers may only charge what the market will bear or risk losing customers to other competitors. Thus, in the current long distance market, it would be difficult if not impossible for any non-dominant carrier to impose artificially exorbitant fees or baseless usage charges without losing customers.

Further, in a regulated environment, carriers incur certain costs to serve customers, even when they make no or just a few long distance calls. In particular, carriers incur billing and account management costs for all presubscribed customers. Further, carriers must pay the primary interexchange carrier charge ("PICC") for each line, as mandated by the Commission, regardless of usage, and carriers incur administrative costs to calculate and recover the PICC from subscribers. In addition, as part of their universal service obligations, carriers incur administrative costs in determining the amounts to be paid to the Universal Service Fund ("USF") as well as whether and how much of the amount paid should be passed-through to the end user customer. Thus, because these government-mandated costs are a necessary part of

³ *Motion of AT&T To Be Reclassified as a Non-Dominant Carriers, Order*, 11 FCC Rcd 3271, 3305-3307 (1996). See also *In the Matter of Policy and Rules Concerning the Interstate, Interexchange Marketplace, Second Report and Order*, 11 FCC Rcd 20730, 20742 (1996) (recognizing that the "high churn rate among consumers of interstate, domestic, interexchange services indicates that consumers find the services provided by interexchange carrier to be close substitutes, and that consumers are likely to switch carriers in order to obtain lower prices or more favorable terms and conditions.").

doing business, carriers should not be criticized for seeking to recover those costs through flat rates or minimum usage plans. Indeed, for many carriers, including new entrants seeking to maintain extremely low usage rates for services, the ability to recover these types of costs through flat rates or minimum usage requirements is essential if they are to remain competitive.

Finally, CompTel is concerned that the Commission's efforts to protect low-income users, while commendable, may open a Pandora's box to re-regulation of the long distance industry. Long distance carriers currently are subject to several fee requirements to recover costs associated with access to the local loop and universal service. While carriers accept these costs as part of their business obligations, how they recover these costs is a business decision that should be made by carriers subject to market constraints. It is this sort of market-based decisionmaking that Congress desired in promulgating the Telecommunications Act of 1996. Now that the long distance market is fully competitive, the Commission's goal should be to eliminate obsolete requirements where possible, not to create additional regulations.

II. THE COMMISSION'S PRIMARY OBJECTIVE SHOULD BE TO ENSURE THAT CUSTOMER RATES REFLECT MARKET PRICES

In the *NOI*, the Commission's primary objective should be to ensure that its regulatory approach establishes the conditions for a competitive market to govern the rate levels and packages that carriers offer to subscribers. With regard to low-volume customers, the Commission's goal should be to ensure that there are no market imperfections that permit IXC's to impose costs on subscribers that are not market-based. Recent activity in the long distance market clearly indicates that non-dominant carriers are operating as expected in a fully competitive market. Prices for long distance services have decreased to reflect reductions in carriers' operating costs. Between 1992 and 1997, the average per-minute rate for long distance

calls decreased 33 percent from 15 cents per minute to 10 cents per-minute.⁴ Moreover, a one-minute call that cost 15 cents seven years ago may now cost as little as 3 cents per minute, a reduction of nearly 80 percent.⁵ CompTel submits that the application of minimum usage fees has allowed carriers to significantly reduce the per-minute rates for calls. This decrease in price is exactly what the Commission intended in deregulating the long distance industry and further proof that carriers are acting in response to market forces.

With regard to low-income subscribers, CompTel shares the Commission's concerns that these users should not be burdened with inequitable minimum usage and flat-rated charges. However, in assessing the market conditions for low-income individuals, the Commission must distinguish its concern for *low-volume* users and *low-income* users. As Commissioner Powell noted in his Separate Statement to the *NOI*, as a general matter, a low-volume user does not necessarily equate to a low-income user, and *vice versa*.⁶ Many low-volume callers make few long distance calls as a matter of choice and not due to financial circumstances, while many low-income persons choose to make a relatively large number of long distance calls.⁷ Therefore, any policies directed at low-volume users are an extremely imprecise way of seeking to provide assistance to low-income subscribers. In any event, where low-income users are concerned, CompTel believes that there are meaningful ways to address

⁴ See *Telecommunications Industry Revenue: 1997, Table 5*, Jim Lande and Katie Rangos, Industry Analysis Division, Federal Communications Commission, Washington, D.C. (Oct. 1998).

⁵ *Excel Communications Announces Three Cents-A-Minute Calling Plan*, Company Press Release (September 7, 1999).

⁶ *NOI, Separate Statement of Commissioner Michael K. Powell* at 3.

⁷ See *id.*

the impact of flat-rated and minimum usage charges without prescribing how IXC's may recover costs for services.

A. Allow Customers to Subscribe to Local Services Only

One way to ensure that low-income (or low-volume) customers can avoid flat-rated and minimum service charges associated with interexchange services is to require the ILECs to offer customers the option of subscribing to local services only. Such an option would enable customers to avoid all charges assessed by interstate interexchange carriers by, in effect, opting out of interstate calling from their access lines. (Such customers would continue to have interstate calling options through prepaid cards, pay telephones, and other mechanisms.)

Under the current universal service regime, ILECs are required to provide toll blocking or limitation service for Lifeline customers who request such options.⁸ The ILECs are eligible to receive additional universal service funds to cover the costs associated with voluntary toll limitation. CompTel urges the Commission to consider enacting a similar support program for all customers by allowing customers the option of subscribing to local services only. The ILECs should now have the technical capability to block toll calls from a subscriber as a result of their Lifeline toll blocking requirements. CompTel believes that the local services option would be particularly attractive to low-income, low-volume users, since many upper-income, low-volume subscribers might wish to retain the option of making 1+ interstate calls.

In addition, while CompTel generally opposes any proposal mandating carriers to include informational inserts in billing statements, CompTel would not object to a one-time billing insert by the ILECs which informed local callers of their option not to presubscribe to a long distance carrier. The option to subscribe to local services only is tantamount to a new

service offering and, as such, customers must be made aware of its availability. CompTel submits that the ILECs should bear this responsibility as an integral aspect of their provision of local exchange service, and therefore such costs should not be passed through to long distance carriers. Moreover, customers often pre-select their long distance carrier when initiating local service and, thus, should be apprised of all options, including the option not to pre-select a carrier, at that time. There would be no added costs to the ILECs since they already have customer service representatives available to discuss service alternatives with new customers.

B. Reform the Way the PICC Is Assessed

In addition, CompTel strongly encourages the Commission to reevaluate how PICC charges are assessed upon end users. As CompTel has stated in the past, the Commission should require the ILECs to bill the PICC directly to the end user.⁹ The process by which the ILECs recover the PICC is not optimal. Presently, the ILECs bill the PICC to the presubscribed interexchange carrier, which in turn must collect the PICC from end-users. This mechanism is problematic because it is inefficient to use the IXC as a middleman. The ILECs have the data and billing systems in place to collect the PICC directly from subscribers and, as the ultimate beneficiaries, they should be solely responsible its collection. Recognizing that this proceeding may not be the appropriate forum to resolve this issue, CompTel encourages the Commission to review issues involving PICC recovery in the access reform or other relevant proceeding.

⁸ *In the Matter of Federal-State Joint Board on Universal Services, Report and Order*, 12 FCC Rcd 8776, 8980 (1997).

⁹ *See Comments of the Competitive Telecommunications Association, In the Matter of MCI Telecommunications Corporation, Petition for the Prescription of Tariffs Implementing Access Charge Reform*, CC Docket No. 97-250 (dated March 18, 1998).

III. COMPTTEL OPPOSES ANY PROPOSAL TO EXPAND THE UNIVERSAL SERVICE FUND OR REGULATE HOW CARRIERS PASS THROUGH ACCESS CHARGES

A. There Is No Basis To Expand the Universal Service Fund to Include Long Distance Services

CompTel opposes any efforts to expand the universal service program to include interstate long distance services. The purpose of the Universal Service Fund is to provide low-income individuals and subscribers in high-cost rural areas with affordable access to essential telecommunications services. There is no reason to believe at this time that long distance services -- while commonly used -- are "essential" in the universal service context. Moreover, CompTel believes that it would be contrary to the public interest to make the USF, which already is too large, even larger to support the inclusion of long distance services in the program. Although carriers are assessed universal service-related costs, it is the consumer that ultimately pays for the program in the form of higher rates.

Furthermore, expansion of the USF is not warranted in the current marketplace. As stated above, the long distance market is now fully competitive and, as a result, consumers have numerous service providers and service offerings from which to choose. Long distance rates are also at an all-time low. Accordingly, because market forces already have fostered lower service rates, there simply is no reason to expand the program to create unnecessary subsidies for long distance service. Moreover, there is no way to accurately target a long distance subsidy since low-volume usage is not necessarily an indication of low-income.

B. The Commission Should Refrain From Inquiring About The Reasonableness Of Carriers' Charges To Recover USF Charges and PICCs

CompTel urges the Commission not to inquire whether carriers are somehow "over-recovering" the costs they incur in connection with the USF charge and PICCs from a

particular subscriber or class of subscribers. There simply is no objective way for the Commission to judge accurately whether a particular IXC's charges are cost-based. Rather, the Commission should rely upon market forces in the intensely competitive long distance market to ensure reasonable practices by non-dominant carriers. Should there arise a case where the Commission or customer believes that a carrier may be recovering its access charge and universal service costs in unreasonable ways, the Commission should use its enforcement authority under Title II of the Communications Act, or if appropriate, by opening rulemaking dockets to address those issues directly.

C. CompTel Opposes Any Proposals to Regulate How Carriers Pass-Through Costs

In the *NOI*, the Commission inquires as to whether it should require carriers to: (1) maintain rate plans that do not include a minimum monthly charge; (2) pass-through a specific portion of interstate switched access charge reductions to a basic rate plan; and (3) pass-through a PICC calculated as a percentage of the bill.¹⁰ CompTel opposes each of the above proposals because they would result in unwarranted interference in a fully competitive marketplace. In addition, there is no evidence that any of these proposals would significantly redound to the benefit of low-income subscribers. There already are carriers that do not include monthly minimums in their rate plans. Likewise, market forces ensure that carriers efficiently pass-through any net access charge reductions, which is one of the reasons that long distance rates are continually decreasing. To pass through the PICC as a percentage of the total bill, while helpful for some, would create fluctuations in billing statements for many customers,

¹⁰ *NOI* at 13.

including low-volume customers, and a degree of uncertainty that currently does not exist. Further, such a pass-through requirement would create a new implicit subsidy from high-volume to low-volume users which is neither economically efficient nor necessary to ensure that low-income (and low-volume) users are treated equitably in the current long distance market. Further, as noted above, any such subsidy would be badly flawed because it would inaccurately equate low-volume with low-income subscribers.

D. CompTel Opposes a Requirement to Include Billing Inserts

While CompTel generally supports any efforts to increase customer awareness, CompTel opposes the Commission's proposal to require carriers to include consumer education inserts in billing statements. The cost of requiring an additional billing insert would be expensive for carriers and, ultimately, would result in higher rates for customers. Instead, CompTel urges the Commission to rely on competitive market forces to ensure that customers are fully apprised of the various service alternatives. As currently is the case, in a competitive market, carriers will go to great lengths to inform customers of their service offerings in an effort to maintain a competitive edge and win more customers. However, if the Commission feels compelled to require billing inserts, CompTel urges the Commission to require a single insert rather than monthly billing inserts.

IV. CONCLUSION

CompTel respectfully submits that the Commission should not adopt the proposals in the *NOI* at this time. As discussed throughout, the long distance marketplace is fully competitive so as to eliminate the need for pricing regulations directed at non-dominant carriers. Accordingly, CompTel urges the Commission to continue the path to full competition and rely upon market forces to ensure reasonable and equitable rates for consumers.

Respectfully submitted,

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Date: September 22, 1999

CERTIFICATE OF SERVICE

I, Andrea D. Pruitt, hereby certify that copies of the foregoing Comments of the Competitive Telecommunications Association were served on September 22, 1999 by messenger on the following persons.


Andrea D. Pruitt

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Priceline Dials Up New Option

To Auction Off Unused Long-Distance

By Anick Jesdanun
The Associated Press

NEW YORK, Nov. 8 — Priceline.com, the Internet service that lets customers name their price for plane tickets, hotel rooms, cars and groceries, is moving into the long distance phone business.

The service, which was announced today, would let customers bid for blocks of long-distance calling time. It is to begin early next year.

The service, which would begin early next year, would let customers bid for blocks of long-distance calling time.

Daniel H. Schulman, the Web service's president and chief operating officer, said replacing AT&T, Sprint and the other long-distance providers is not the goal. Rather, his company will work with those phone companies to maximize usage of their existing phone networks.

Wasted, Empty Fiber

"If somebody isn't talking over that fiber, it's a waste," Schulman said. "But if you lower the cost of the call to increase demand, you have to lower it for all existing customers, destroying prices, revenue and profits."

Priceline.com seeks to bypass that restriction by letting carriers gauge demand ahead of time and lower rates only on the calls that otherwise would not be made at regular prices. Schulman predicted savings of 20 percent to 30 percent off regular rates.

Customers would go the Web site and name the price they want to pay for a certain number of minutes of calls to a specific domestic or international location. Long-distance carriers respond if they can meet the demand. Callers also have per-call options, as well as a call-anywhere plan.

No Extra Fees

Once the requested rate is matched, callers will have to dial a special number. The company promises no surcharges, hidden fees or minimum calling times and customers can keep their regular carrier for normal calling.

Priceline.com enters the market at a time of intense competition among large and small long-distance carriers with a variety of sometimes-confusing rates.

Last week, priceline.com began offering grocery services. Coupled with increased demand for Thanksgiving weekend travel tickets and its own prescheduled computer upgrades, the company faced delays in filling grocery orders Wednesday and Thursday.

Schulman said the problem was fixed by Friday, and priceline.com will be ready to handle the long-distance business next year. ■

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Turning Bandwidth Into A Commodity

Trading exchanges are planned for buying and selling backbone capacity

By Rebecca Cantwell

The race is on to sell capacity on information pipelines the same way electricity is traded — through commodities exchanges for bandwidth that could transform the Internet economy.

At least two young companies are launching trading exchanges that allow buyers and sellers to make anonymous deals for telecommunications capacity. Other companies are offering minutes for sale. The field also includes giant Enron (www.enron.com), which hopes to duplicate its success in energy trading in the \$360 billion communications bandwidth market.

While observers said there will be a big shakeout of the numerous players before a widely used bandwidth commodities exchange gets established, the jockeying for position is intensifying. For example:

- **The Global TeleExchange** (www.thegtx.com) recently signed a \$25 million deal with Lucent Technologies to build a high-speed Asynchronous Transfer Mode backbone network to offer carriers and Internet access providers an electronic system for trading bandwidth and minutes in real-time. It hopes to open for orders in April.

- **RateXchange** (www.ratexchange.com), which has been bringing buyers and sellers together for two years, just changed its business model after realizing only about one in 10 deals was

actually closing. The company this month launched a neutral online marketplace where spot and forward contracts can be traded anonymously.

- **Williams Communications** (www.wilcom.com), which has worked to negotiate flexibility in contracts with customers, didn't think conditions were yet right for a bandwidth exchange. But it has appointed a veteran energy marketer, Sharon Crow, as vice president in charge of bandwidth markets to explore options.

And Enron, which has been working on a commodity market for bandwidth for nearly a year, said it has done the three things necessary to trade bandwidth and is now up and running.

First, it has set up pooling points in Los Angeles and New York so any carrier hooked to a "bandwidth manager" can connect and trade capacity in real-time, linked to hardware and software for monitoring quality-of-service and other issues. Second, it has set a single benchmark to trade around: one Time Division Multiplexing DS-3 (45-megabit-per-second) line from New York to Los Angeles. And third, it has developed standardized terms and conditions that can make for a legally binding contract.

The company said it just closed its first trade with Global Crossing.

"These three elements mark every other commodity," said Enron Vice President Tom Gros, who heads the effort after having brought his company into other new commodity markets. "I'm aware Internet-based brokers and others will use it to broker trades. We designed this as an open architecture, and we are happy that it adds liquidity."

Some of the other players are skept-

tical of Enron's role. As an owner and operator of both interconnection points and a national network, Enron competes directly with potential bandwidth exchange customers.

Andrew Romans, chief information officer and co-founder of The GTX, is one of many who think there won't be room for all the companies competing to establish a place. "There's possibly

everyone predicting prices continuing to drop, the development of bandwidth exchanges is likely to alter the positions of various players.

For example, a start-up could buy specific amounts of network access on the spot market, allowing it to enter an Internet business without spending millions of dollars in capital costs. Or a giant such as MCI World-

At a Glance

Brokering bandwidth

A selection of communications brokers and energy and financial market makers

- **ARBINET COMMUNICATIONS** (www.arbinet.com)
Minutes broker since 1997; considering bandwidth

- **BAND-X** (www.band-x.com)
First electronic telephone minutes exchange, established in London in July 1997; also brokers bandwidth (London)

- **ENRON** (www.enron.com)
Risk merchant; leading marketer of electricity and natural gas in the U.S.; established presence in electronic energy trading with EnronOnline, a worldwide electronic energy commodity market-making system; bandwidth market maker

- **INTERXION** (www.interxion.com)
Minutes broker since July 1998; also manufactures the InterXion switch for running pooling points (Amsterdam)

- **MIN-X.COM** (www.min-x.com)
Minutes broker

- **THE GLOBAL TELEEXCHANGE (THE GTX)** (www.thegtx.com)
Minutes and bandwidth broker since July 1999

room for more than one, but not much more than one in the same space," he said. "But there's definitely room for many telecom carriers to offer market-driven rates to corporate customers."

Buyers and sellers now negotiate for capacity continuously, but the deals tend to be laborious and long-term.

With some experts predicting a growing glut of bandwidth and nearly

Com could sell off excess capacity for a fraction of what it might charge big corporate customers.

"There's an inevitable lag between when you light up a line and when the customer demands it, and this could be a new way to manage growth ahead of the curve," said CIBC World Markets telecom analyst Steve Kamman. ▲

SBC Makes Deal To Offer Fast Access On Phone Lines

By Rebecca Cantwell

SBC Communications filled in a big piece of the puzzle about its data plans by naming Network Access Solutions as its partner to roll out fast Internet access over phone lines outside its region.

For NAS, the deal means a cash infusion that will allow it to reach 90 percent of the nation's top 50 markets — a reach it said is unparalleled among other Digital Subscriber Line (DSL) competitors.

SBC and Telefonos de Mexico, SBC's partner in other enterprises, agreed to evenly split a \$150 million investment to help fund expansion of the NAS network into 30 markets in

BellSouth and U S West territory. The funding, in the form of a convertible preferred security, will allow Telmex to start offering services outside Mexico.

'Major relationship'

NAS Chief Executive Jon Aust termed his company's deal with SBC "the first major relationship" between a competitive data carrier and a regional Bell. "Assuming we reach the potential this investment represents, we will represent the first near-ubiquitous local and long-distance provider," he said.

As part of the deal, the companies have agreed to work together on network architecture, systems for ordering and billing, and sales and market-

ing, Aust added.

Until now, NAS (www.nas-corp.com) has sold exclusively to business customers in Bell Atlantic states. Currently, the company buys copper lines from the Bell and adds DSL equipment to it. "As we move into the residential marketplace, we would hope to take advantage of line sharing, and SBC would be a great partner," Aust said.

NAS will give SBC (www.sbc.com) a wholesale price on the DSL service, which SBC can resell to customers outside its region on a nonexclusive basis, according to SBC spokesman Kevin Belgrade. And NAS is expected to sell SBC telecom services in the new markets.

"Basically it gives us an immediate

network without the traditional capital outlay," Belgrade said.

The partnership will include Prodigy Internet, which will become the exclusive Internet service provider of SBC in its 100 million-consumer territory, and include marketing of the service through CompUSA.

"This agreement will allow SBC to reach outside their region and be a player in other parts of the country," said telecom analyst Jeffrey Kagan.

For SBC, the deal marks the company's second aggressive data play outside its region in recent weeks. Last month, SBC announced it will sell Infonet's array of data products and services to multinational corporations across the nation. ▲

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 * Zip Code:

 * Email Address:

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 * **Primary phone number to be switched:**

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10 digits, no punctuation.
Example: 1234567890

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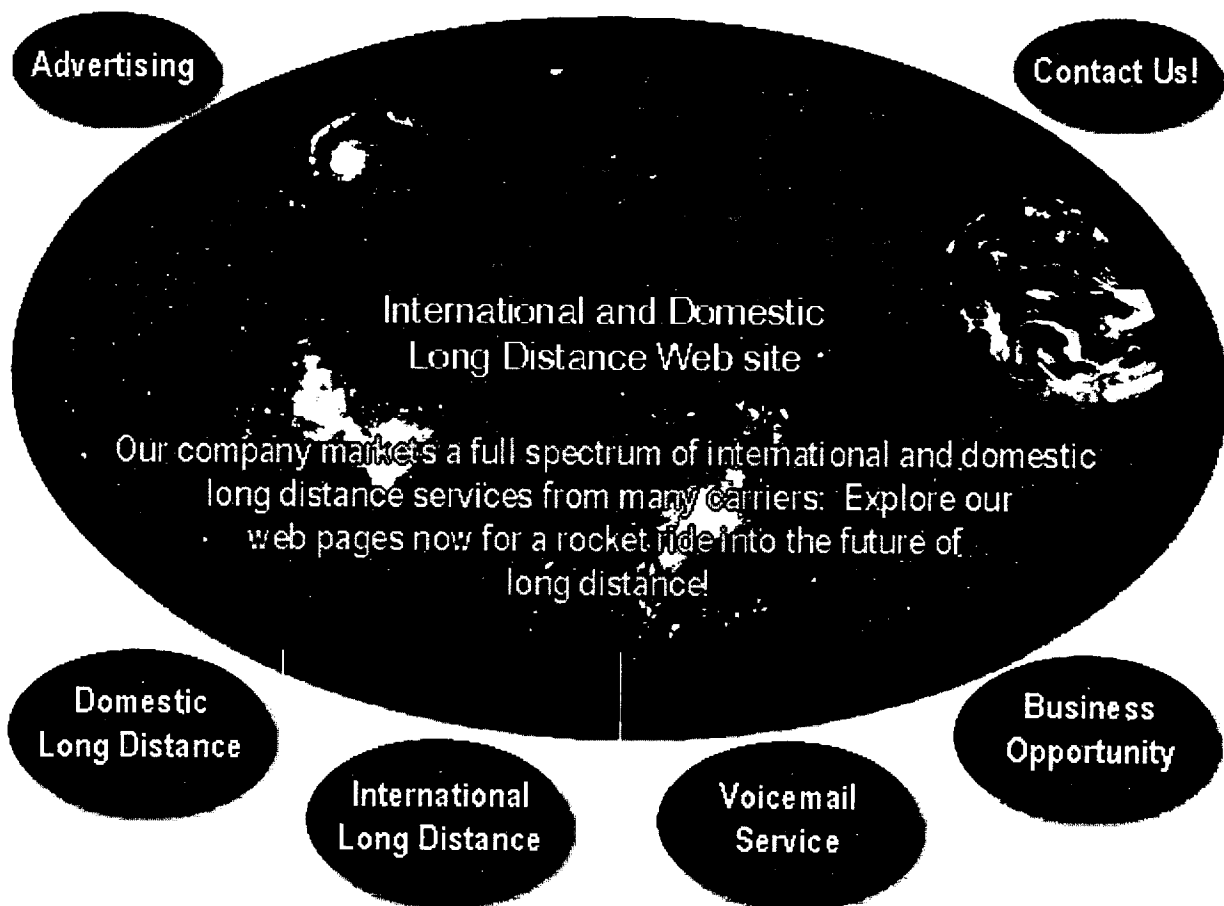
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minute. 1016444 has no monthly fees for zero usage or usage over \$20.00 per month. There is a \$2.00 monthly fee for usage under \$20.00 per month. There are no surcharges per call and all calls are billed in 6 second increments with an 18 second minimum. Sign up with 1016444 online using their secured online form. You must sign up online to get the 1016444 discounted long distance rates. Tennessee. Tennessee Long Distance. Call Tennessee. intrastate long distance

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InterState
10.2¢/min

TTI, utilizing the Worldcom/Witel network, provides great interstate and intrastate long distance service from Tennessee with a high-quality, digital, fiber-optic connection. Interstate rates are 11.0¢/min and 10.2¢/min peak and offpeak and 11.5¢/min intrastate. TTI bills in 6-second increments with a 30 second minimum. There are no monthly fees, installation fees or other hidden fees or surcharges with service. You only pay for the amount of your actual long distance time. Get the same exact rates when people call you via your personal 800/888 number for only \$2.00 extra per month! To initiate service, please contact InterStar at 435-755-6576 or send e-mail to texstar@xmission.com for more information and to request forms. Tennessee. Tennessee Long Distance. Call Tennessee. intrastate long distance

FCI

Intrastate
14.6¢/min

FCI is perhaps the most unique long distance service out of all offered by InterStar. Instead of receiving bills through the mail, FCI will display them in real-time on a password-protected web page! [Click here](#) for an

InterState example. FCI's 24-hour long distance rates are 8.9¢/min interstate and 8.9¢/min 14.6¢/min intrastate inside Tennessee. Rates are billed in 6-second increments with a 30-second minimum. There is no monthly fee if usage is above \$50.00 per month. There is a \$5.00 monthly service fee for usage under \$50.00 per month. There are no other fees or surcharges with service. FCI also provides free toll-free numbers with the same low rates at no extra charge. Tennessee. Tennessee Long Distance. Call Tennessee. intrastate long distance. Long Distance

Tennessee. Tennessee Long Distance. Call Tennessee. intrastate long distance

Do you have a better intrastate rate than 9.50¢ per minute inside Tennessee with your existing program? Perhaps a better interstate rate than 6.90¢ per minute when calling outside of Tennessee? If this is true, perhaps you should sign up for InterStar's Residential Long Distance Gazette!

When we update services or our low residential rates, we send to our customers and website visitors complete information including rate and service updates. You have no need to further search the internet for cheaper long distance rates because InterStar does this service for you completely free! Simply enter your name and e-mail address in the below form and press the button. You can unsubscribe at any time. Give us a try!

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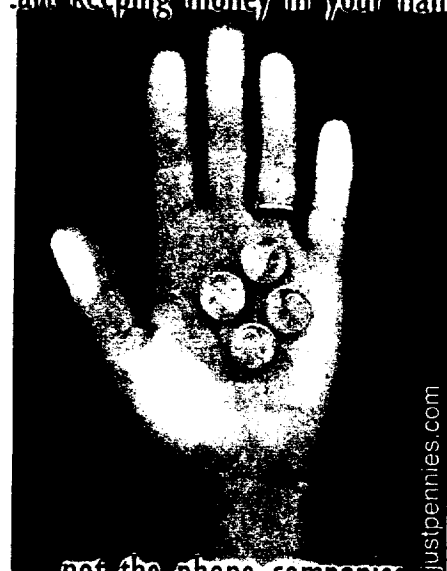
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Finally, LONG DISTANCE FOR 3.9¢ per minute.

3.9 cents
a minute for
domestic
long
distance

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not the phone companies.

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24 hours a day, 7 days a week,
saves you 50% or more off your long distance.

No Tricks, No Gimmicks, No Restrictions
Just \$9.95 for 250 minutes, No set-up fee.
(100 minutes for your first 30 days, 150 for your second 30 days)*
After 60 days keep your low 3.9 cent rate with our special
monthly plan options. Call our operators and ask how!

Find Me, Follow Me one number does it all.

12 way conference calling
and much, much more.

Enjoy Long Distance at 3.9 cents a minute.

Now your domestic long distance calling rates are 3.9 cents a minute! From any touch tone phone. INTERNATIONAL CALLS are also an exceptional value! Your new rates travel with you wherever you go day or night.

Visual Messaging

At your option, get all your messages and modify your account right over the web! Even forward your voice and fax messages to your e-mail.

Follow Me Faxing

Instantly forward and print any fax document to any fax machine, anywhere! We make it easy to get at your important faxes even when you're on the go day or night.

Personal Toll Free

You're always reachable. At only 3.9 cents a minute your personal Toll Free number keeps your clients, friends and family as close as the nearest phone.

Find Me, Follow Me, One Number.

One number for all your needs. Whether it's an incoming call, a fax, voice mail message or your pager, it all flows through just one phone number to you.

Call Screening

Take the calls you want; Skip the ones you don't. With call screening you hear the callers name or phone number before connecting. You decide whether to take the call.

Phone to Phone Transfer

It's easy to move a call seamlessly from one telephone to another without disconnecting the caller. You can move a call from your mobile phone to your desk phone and visa versa without missing a beat. It's easy and it gives you the freedom to move.

Conference Features

Includes as many as twelve party conferencing. It's easy to set up from any phone.

plus many, many more time saving and enhanced features

Call toll-free any time or order on line at www.skymail.com.

Just imagine, one voice mail, and only one phone number to give out with the ability to have all your calls screened.

YES! I owe it to myself to make my life simple in a complicated world and keep the money in my pocket.

Order Now:

Just pennies domestic rates 3.9 cents per minute for the plan shown. Rates and plans are subject to change without notice. They may go lower.
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GET THE BEST



FOR A NICKEL LESS

CO PR 5M2

**now
5¢**

per minute*

**Now pay 5¢ per minute* on all state-to-state calls
24 hours a day, 7 days a week.**

What are you waiting for? Try it today!



15¢

pay a

more

5TalkSM to day! Check out the new 5TalkSM Just dial 10-10-636

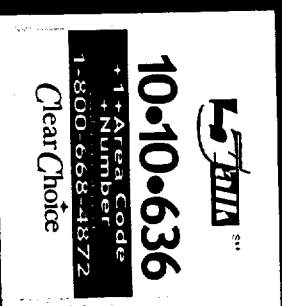
- 5¢ per minute* on all state-to-state U.S. long distance calls 24 hours a day, 7 days a week.
- Low 15¢ minimum per completed call.
- Customer service assistance available around-the-clock, every day of the year.
- No monthly fee.
- No need to cancel your existing carrier.

Place the enclosed stickers on or near your phone and use **5Talk 10-10-636** for all your long distance calls.



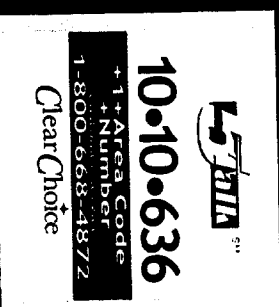
ClearChoice
communications

Place these stickers on or near your phone and start saving on your very next call!



PEEL HERE

10-10-636



PEEL HERE

10-10-636

All new users will automatically receive 5Talk rates when dialing 10-10-636. Existing Clear Choice Communications' customers may select the new service by calling the customer service center at: 1-800-583-8307

*State-to-state calls using 5Talk are 5¢ a minute and are subject to a low 3 minute (15¢) minimum per completed call. In-state rates vary and are subject to a 3 minute minimum per completed call. 5Talk rates are not inclusive of governmental taxes and fees.

Including the Universal Service Fund. Subject to service availability.

*Calls to Canada are subject to a 3 minute (30¢) minimum per completed call.

5Talk and 10-10-636 are service marks of VarTec Telecom, Inc. Clear Choice Communications is a division and registered service mark of VarTec Telecom, Inc. ©2000 VarTec Telecom, Inc. All rights reserved.



Mr. Garry L. Sharp
1908 Tyne Blvd.
Nashville, TN 37215-4704

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Get 5,000 miles closer to
your dream destination.
Call 1-800-545-2019

Dear Mr. Garry L. Sharp,

What better way to kick off the new year than with our new *MCI 5c Everyday*SM rate? That's 5c every evening and *all* weekend long. We're so confident you're going to love it, we're offering 5,000 bonus miles just for trying it out. Sign up today for MCI WorldCom's long distance (and local toll service where available) by calling **1-800-545-2019** before March 31, 2000.

5,000 Bonus Dividend Miles

You'll receive 5,000 Dividend Miles[®] while enjoying great new low rates (1,000 miles after each month for five months as an MCI WorldComSM customer).*

Plus Ongoing Dividend Miles

In addition, you'll get five miles for every \$1 spent on MCI WorldCom services (excluding taxes, surcharges and credits).

Great Low Rates Including *MCI 5c Everyday*

- Just 5c a minute every evening (7 p.m. - 7 a.m.) and all weekend long for state-to-state calls from home*
- 5c a minute on Sundays to Canada with MCI Everyday International**
- 9c a minute on Sundays to UK and Western Europe with MCI Everyday International

It's easy to enroll. Call **1-800-545-2019** or return the attached reply card.

Sincerely,

Colleen McCauley
Colleen McCauley

Colleen McCauley
Manager, Dividend Miles Partnership Marketing
US Airways

Blair R. Harsh

Blair R. Harsh
Program Director, Partner Marketing
MCI WorldCom

P.S. Remember, that's 5,000 bonus miles plus *MCI 5c Everyday*.

Get 5,000 bonus miles closer to your dream destination.

Yes. You can get a maximum of 5¢ in bonus miles and 5 miles per dollar spent on the A/C MILE program, excluding taxes, surcharges and credits.

- ☒ For more information, write MCI Telecommunications Corporation and local toll service (where available) and request the MCI U.S. Airline's Calling Cards.

1. *Callong Card PIN* _____

- ☐ I want to sign the MCI 5.1 EULA on my only and receive my MCI US Airways Calling Cards. Checking this box means MCI WorldCom will not carry my local toll service.

To receive information or sample about other MCI WorldCom products and services, please provide your e-mail address.

If your phone number has changed does not appear, please cross out provide new number below.

(615) 331-5071

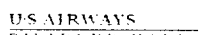
List of amino acid phosphorylation sites: 1 = phosphorylated, 0 = not phosphorylated.

897/VHZ ZUAP (CHVY)
DIVIDEND MILES ACCOUNT #: 157N6E2

Your phone number and signature are required for enrollment.

X

1. *Introduction*. MCMC is a well-known method for sampling from a target distribution π on a measurable space $(\mathcal{X}, \mathcal{F})$. The Markov chain Monte Carlo (MCMC) algorithm is a stochastic process $(X_t)_{t \geq 0}$ that converges to π in the sense of total variation distance. The convergence of the MCMC algorithm is guaranteed by the ergodic theorem. The MCMC algorithm is a stochastic process $(X_t)_{t \geq 0}$ that converges to π in the sense of total variation distance. The convergence of the MCMC algorithm is guaranteed by the ergodic theorem. The MCMC algorithm is a stochastic process $(X_t)_{t \geq 0}$ that converges to π in the sense of total variation distance. The convergence of the MCMC algorithm is guaranteed by the ergodic theorem.



Mr. Garry L. Sharp
1908 Tyne Blvd.
Nashville, TN 37215-4704

MCI WORLDCom

Certificate No.: 91773875

SEVENTY-FIVE DOLLARS AND 00 CENTS

\$75.00

Issued December 30, 1999
Valid Until March 31, 2000

TO THE ORDER OF:

116 T76 P214*****AUTO**5-DIGIT 37215
Garry Sharp
1908 Tyne Boulevard
Nashville TN 37215-4704

|||||

**Call 1-877-834-8382 for
your FREE long distance credit!**

[Signature]

Authorized Signature

Is AT&T charging you more? Call 1-877-834-8382 to find out.

Dear Garry Sharp:

You've been comfortable with your AT&T long distance service for quite some time. But how comfortable would you be if you knew you were paying significantly higher rates? MCI 5¢ Everyday™ is a 28% savings over AT&T's One Rate 7¢ plan on evening and weekend calls.

One quick phone call is all it takes to start saving. With MCI WorldCom™ residential long distance you'll receive:

- **5¢ a Minute. Every Evening and All Weekend Long.** This great low rate applies to all your state-to-state calls from home. So you can talk for 20 minutes and spend only \$1! And this is not a short-term promotion. It's another ongoing advantage of being an MCI WorldCom customer.
- **Enjoy this great rate on all your state-to-state calls from home 7 p.m. to 7 a.m. weekdays and all weekend long.**

Call 1-877-834-8382 today to sign up for MCI 5¢ Everyday and local toll service where available.*

As soon as you call, you'll receive an invoice credit of up to \$25 each month for three consecutive months on your MCI WorldCom long distance bills. It's our way of saying thank you for joining MCI WorldCom.

We look forward to providing you with the best value in long distance service, including great rates on all your international calls. Why not start right away - call us today.

Sincerely,

[Signature: Jan DeFalco]

Jan DeFalco
MCI WorldCom

P.S. Don't settle for higher rates. **This offer expires March 31, 2000, so call 1-877-834-8382 today!**

ENROLLMENT CERTIFICATE

☒ **YES!** Please enroll me in MCI 5¢ Everyday. Plus, give me a \$75 credit* towards long distance service with MCI WorldCom.

☐ **YES!** Enroll me in MCI WorldCom local toll service (where available).

Garry Sharp
1908 Tyne Boulevard
Nashville TN 37215-4704

If your address has changed, please indicate corrections above.
Existing MCI WorldCom customers not eligible for bonus offer.

**For ease of use, please choose
your 4-digit numeric calling card PIN:**

Do not select the same 4 digits (3333) or 4 consecutive numbers (1234 or 4321).
If you do not select a calling card PIN, one will be assigned to you by MCI WorldCom.

To receive information via email about
other MCI WorldCom products and services,
please provide your email address:

Current home telephone number (required):

897/WQJ Z7VC SCVC

Signature/date (required):

X

Today's Date

I authorize MCI WorldCom to notify my local telephone company that I am choosing MCI WorldCom as my primary carrier for the services checked above for the telephone number listed above. I understand that I can have only one primary carrier for each of these services per telephone number and my local telephone company may add a small fee for this change.

MCI WORLDCom

$$\begin{array}{r} 518 \\ \hline 3649 \end{array}$$

PAY SEVENTY FIVE DOLLARS AND NO CENTS **\$ 75.00**

TO THE ORDER OF
Mr. Gary A. Andraca
3530 Liberty Church Rd.
Brentwood, TN 37027-8224

Certificate No.: 652VX48
PH#: (615) 776-3030

**Call 1-800-204-6967 and
join today for your FREE
long distance credit!**

Al. J. [Signature]

Window, or Isle?

A Advantage

Dear Mr. Andraza,

It's easy to get away with up to \$75 in long distance and great long distance rates when you join the MCI/AAdvantage Program. Just call 1-800-204-6267 and join!

Get Away with . . . up to \$75

You'll receive up to \$75 in invoice credits just for signing up for MCI WorldCom[®] residential long distance. As soon as you call, you'll receive an invoice credit of up to \$25 each month for three consecutive months on your MCI WorldCom long distance bills.*

Stay Close with . . . MCI 5¢ Everyday™

Imagine talking 20 minutes and paying only a dollar! You'll pay just 5¢ a minute, every minute, on all your state-to-state calls from home weekday evenings and all weekend long."

For Every \$1 Spent . . . earn 5 Miles

Plus, you'll get 5 miles for every dollar you spend on MCI WorldCom services, such as long distance, local toll calls (where available), Internet, even calling card calls.*

It's easy to join... Hassle FREE

It's simple to switch. Just call 1-800-204-0000 before March 31, 2000.

Sincerely,

7th Zind

Jeff Zidell
Vice President, AAdvantage Marketing
American Airlines, Inc.

Greg Nelson

Greg Nelson
Senior Manager, Partner Marketing
MCIWorldCom

Call 1-800-204-6967

UP TO \$75 FREE LONG DISTANCE

MCIWORLD.COM

SEVENTY-FIVE DOLLARS AND 00 CENTS

ISSUED TO:

Offer Valid Until: March 31, 2000

Gary A. Andraza
9590 Liberty Church Road
Brentwood TN 37027-8224


Authorized Signature

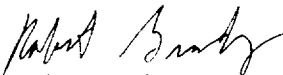
Dear Mr. Andraza

When you sign up to be an MCI/SkyMiles Member, you immediately get the best of both worlds. Not only is it a great way to pile up the miles, it's a great way to save on long distance and local toll service where available! Here are some of the benefits you can expect...

- **Up To \$75 in Free Long Distance.** That's right, we're so sure you'll love our new low rates, we're offering a \$75 invoice credit. Simply call 1-800-269-2187 today and you'll automatically receive a credit of up to \$25 per month for three consecutive months on your MCI WorldCom™ long distance bills. It's that easy!
- **5 miles per dollar spent on Long Distance.** MCI WorldCom rewards its customers with a one-of-a-kind deal that will send you soaring. For every dollar you spend on long distance (excluding taxes, credits and surcharges), you will receive 5 Delta SkyMiles. Every mile is posted automatically and every minute counts. So since you're going to make those calls, why not earn the miles?
- **5 Sundays...Every Sunday!** MCI WorldCom brings your family together on the day you call the most—Sunday—for just 5¢ a minute on all state-to-state calls from your home. No other long distance carrier can offer Delta's SkyMiles members 5¢ Sundays and Delta miles.

However, it's a special offer that won't last long. Don't miss this exceptional opportunity to save big on your long distance. One quick phone call at 1-800-269-2187™ is all it takes (mention bonus code ZDZK). So call now and start saving today! You'll be glad you did.

Sincerely,



Robert Grady
Partnership Marketing
Delta Air Lines



Cathy Peterson
Partnership Marketing
MCI WorldCom

P.S. This offer expires March 31, 2000, so call 1-800-269-2187 today!

Delta Air Lines
SkyMiles

MCIWORLD.COM

ENROLLMENT FORM

ISSUED BY	STATUS	OFFER EXPIRES
DELTA AIR LINES	ACTIVE	31 MAR 00

116 T60 P315*****AUTO**5-DIGIT 37027
Mr. Gary A. Andraza
9590 Liberty Church Road
Brentwood TN 37027-8224

|||||

8977WOG ZDZK

2002687362

☒ **YES!** Sign me up for MCI WorldCom residential long distance so that I can receive a credit of up to \$25.00 per month for three consecutive months on my MCI WorldCom long distance bill.

☐ **YES!** I want to enroll in MCI WorldCom local toll service (where available)*

Please choose your preferred Calling Card PIN:
Do not use the same PIN as your 800, 888, 877, 866 or 855 number (PINs)

My current home telephone number is (required):

(615) 776-3030

My current cell phone number is (optional):

List number to receive a complimentary fax number(s) below:

*Local toll service may vary by state. See state regulations above.

To receive information via email about other MCI WorldCom products and services, please provide an email address.

X _____
I authorize MCI WorldCom to notify my local telephone company that I am choosing MCI WorldCom as my primary carrier for the service marked for the telephone number listed above. I understand that I will be responsible for any charges incurred by my local telephone company.

FREE LONG DISTANCE CERTIFICATE

0218117

MCI WORLDCom

Certificate No. 41718402

7-11

520

77-42

PAYABLE TO: MCI WORLDCom OR YOUR LOCAL RESIDENTIAL TELEPHONE COMPANY

FIFTY DOLLARS AND 00 CENTS

\$50.00

This certificate must be signed on back to be valid. Make address/telephone number corrections if necessary.

Issued: January 6, 2000
Valid Until: March 11, 2000

TO THE ORDER OF:

32010180926
William G. Sharp
1908 Tyne Blvd
Nashville, TN 37215-4704

797/XAA SK29 MCI 5¢ Everyday

Call 1 800 666-1903 to get your
Activation code, then write it here:

ALLFIRST Bank
Baltimore, MD

Deanna W. Wynn
Authorized Signatures

10520001131 77417184024211

MCI WORLDCom

Dear William G. Sharp:

Is AT&T charging you up to 50% more? Call 1 800 think. Now with MCI 5¢ EverydaySM you'll save 5¢

One quick phone call is all it takes to start saving:

- 5¢ a minute. Every evening. Monday thru all your state-to-state calls from home.
- 5¢ a minute. All weekend long. Enjoy calls all day Saturday and Sunday too. †

Call 1 800 666-1903 to sign up for MCI 5¢. Simply enclose it with your next phone bill joining MCI WorldCom.SM

Don't settle for higher rates. Call 1 800 6

Sincerely,

Jennifer Walter

Jennifer Walter
Manager, Domestic Marketing

* Offer valid for customers joining MCI state-to-state calls from home Monday thru Service fees.
† Local toll may also be referred to as in-st.
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